

Sacramento Regional Transit District

## SPECIAL RETIREMENT BOARD MEETING 9:00 A.M. WEDNESDAY, FEBRUARY 1, 2017 REGIONAL TRANSIT AUDITORIUM 1400 29<sup>th</sup> ST., SACRAMENTO, CALIFORNIA

Website Address: www.sacrt.com (29th St. Light Rail Station/Bus 38, 67, 68)

<u>MEETING NOTE:</u> This is a joint and concurrent meeting of the five independent Retirement Boards for the pension plans for the employees and retirees of the Sacramento Regional Transit District. This single, combined agenda designates which items will be subject to action by which board(s). Members of each board may be present for the other boards' discussions and actions, except during individual closed sessions.

ROLL CALL	ATU Retirement Board:	Directors: Li, Morin, Niz, De La Torre Alternates: Jennings, Muniz
	IBEW Retirement Board:	Directors: Li, Morin, Ohlson, Burdick Alternates: Jennings, Gallow
	AEA Retirement Board:	Directors: Li, Morin, Devorak, Robison Alternates: Jennings, McGoldrick
	AFSCME Retirement Board:	Directors: Li, Morin, Mallonee, Hoslett Alternates: Jennings, Kent
	MCEG Retirement Board:	Directors: Li, Morin, Lonergan, Thorn Alternates: Jennings, Sanchez-Ochoa

## PUBLIC ADDRESSES BOARD ON MATTERS ON CONSENT AND MATTERS NOT ON THE AGENDA

At this time the public may address the Retirement Board(s) on subject matters pertaining to Retirement Board business listed on the Consent Calendar, any Closed Sessions or items not listed on the agenda. Remarks may be limited to 3 minutes subject to the discretion of the Common Chair. Members of the public wishing to address one or more of the Boards may submit a "Public Comment Speaker Card" to the Assistant Secretary. While the Retirement Boards encourage your comments, State law prevents the Boards from discussing items that are not set forth on this meeting agenda. The Boards and staff take your comments very seriously and, if appropriate, will follow up on them.

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(Bonnel)

		<u>ATU</u>	<b>IBEW</b>	AEA	AFSCME	MCEG
1. Resolution:	Receive International Fund Manager Candidate Presentations and Select Replacement Fund Manager (ALL). (Bernegger)			$\boxtimes$		$\boxtimes$
2. Information:	Introduce the 2016 Actuarial Valuation Completed by Cheiron (ALL).	$\boxtimes$	$\boxtimes$	$\boxtimes$	$\boxtimes$	$\boxtimes$

## REPORTS FROM COMMITTEES REPORTS, IDEAS AND COMMUNICATIONS ADJOURN

#### NOTICE TO THE PUBLIC

It is the policy of the Boards of Directors of the Sacramento Regional Transit District Retirement Plans to encourage participation in the meetings of the Boards of Directors. At each open meeting, members of the public shall be provided with an opportunity to directly address the Board on items of interest to the public that are within the subject matter jurisdiction of the Boards.

This agenda may be amended up to 72 hours prior to the meeting being held. An agenda, in final form, is located by the front door of Regional Transit's building at  $1400 - 29^{th}$  Street and posted to RT's website at www.sacrt.com.

Any person(s) requiring accessible formats of the agenda or assisted listening devices/sign language interpreters should contact the Human Resources Manager at 916-556-0280 or TDD 916/483-4327 at least 72 business hours in advance of the Board Meeting.

Copies of staff reports or other written documentation relating to each item of business referred to on the agenda are on file with the Human Resources Administrative Technician at 916-556-0298 and/or Clerk to the Board of Directors of the Sacramento Regional Transit District and are available for public inspection at 1400 29<sup>th</sup> Street, Sacramento, CA. Any person who has questions concerning any agenda item may call the Human Resources Administrative Technician of Sacramento Regional Transit District to make inquiry.

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Agenda	Board Meeting	Open/Closed	Information/Action	Issue
Item No.	Date	Session	Item	Date
1	02/01/17	Retirement	Action	12/28/16

Subject: Receive International Fund Manager Candidate Presentations and Select Fund Manager (ALL). (Bernegger)

## <u>ISSUE</u>

Receive International Fund Manager Candidate Presentations and Select Fund Manager (ALL). (Bernegger)

## RECOMMENDED ACTION

- A. Adopt Resolution 17-02-\_\_\_\_, Directing Staff to Negotiate a Contract with Lazard Asset Management to Provide International Large Cap Fund Manager Services within the International Equity Collective Investment Trust and Authorizing the Sacramento Regional Transit District General Manager/CEO to Execute Said Contract, in a Form Acceptable to Legal Counsel
- B. Adopt Resolution 17-02-\_\_\_\_, Directing Staff to Negotiate a Contract with Pyrford International PLC to Provide International Large Cap Fund Manager Services within the Equity Only Non-U.S. Mutual Fund and Authorizing the Sacramento Regional Transit District General Manager/CEO to Execute Said Contract, in a Form Acceptable to Legal Counsel
- C. Adopt Resolution 17-02-\_\_\_\_, Directing Staff to Negotiate a Contract with Pyrford International PLC to Provide International Large Cap Fund Manager Services within the New Hampshire Investment Trust and Authorizing the Sacramento Regional Transit District General Manager/CEO to Execute Said Contract, in a Form Acceptable to Legal Counsel

or

D. Retain JP Morgan as the Boards' International Large Cap Fund Manager

## FISCAL IMPACT

Investment Management Fees – Based upon the JP Morgan International Large Cap Fund investment balance of \$22,489,565 as of 11/30/2016:

 A. Lazard Asset Management (Lazard) – Maximum annual fee of 80 basis points (BP) or \$179,917.

Approved:

Presented:

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Agenda Item No.	Board Meeting Date	Open/Closed Session	Information/Action Item	lssue Date
1	02/01/17	Retirement	Action	12/28/16

Subject:	Receive International Fund Manager Candidate Presentations and Select Fund
	Manager (ALL). (Bernegger)

- B. Pyrford International PLC (Pyrford) Equity only non-U.S. mutual fund maximum annual fee of 84 BP or \$188,912.
- C. Pyrford New Hampshire Investment Trust maximum annual fee of 70 BP or \$157,427

or

D. JP Morgan (current manager) – Performance based pricing: Base fee of 15 BP per year and a performance fee equal to 20% of the fund's outperformance over the MSCI EAFE Index benchmark, for an annual maximum fee of 75 BP or \$168,672.

Transition Manager – A transition manager is unlikely to be needed for any of the options, but if a transition manager becomes necessary as a result of the form of payout from the JP Morgan fund, the cost is estimated to be between \$10,000 and \$20,000.

## DISCUSSION

The Retirement Boards selected JP Morgan as an international large cap fund manager in 2007. Prior to that time, Brandes was managing all of the Plans' international large cap investments. Brandes was a much higher-risk fund manager with very volatile performance depending on market conditions. JP Morgan was hired as a complement to Brandes, offering a more conservative approach aimed at more closely tracking the benchmark while providing protection in a down market. The Retirement Boards terminated their contract with Brandes in 2012 and placed the assets previously managed by Brandes in the State Street Global Advisors' SSgA EAFE Index Fund. JP Morgan currently holds approximately \$22.4 million in Plan assets, while the SSgA MSCI EAFE Index holds approximately \$8.9 million.

Staff and Callan first advised the Boards in June, 2015 that JP Morgan does not appear to be the best fit within the international large cap space for the Plans going forward. At the June 15, 2016 Quarterly Retirement Board Meeting, pursuant to the terms of the Statement of Investment Objectives and Policy Guidelines for the Sacramento Regional Transit District Retirement Plans, the Retirement Boards officially placed JP Morgan on the "Watch List" and gave direction to staff to perform a search for a replacement international large cap fund manager. Subsequently, at the August 31, 2016 Special Retirement Board Meeting, the Boards approved an amended contract with JP Morgan to move to performance based pricing based on JP Morgan's performance relative to the MSCI EAFE Index benchmark, which could generate significant savings on investment management fees.

As presented at the September 14, 2016 Quarterly Retirement Board Meeting, Callan Associates, Inc. (Callan) has reviewed JP Morgan's performance based on the June 30, 2016 investment manager returns report (gross of fees), as follows:

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Agenda Item No.	Board Meeting Date	Open/Closed Session	Information/Action Item	Issue Date
1	02/01/17	Retirement	Action	12/28/16

Subject:	Receive International Fund Manager Candidate Presentations and Select Fund
	Manager (ALL). (Bernegger)

	Last	Last	Last 3	Last 5	Last 7
	Quarter	Year	Years	Years	Years
JP Morgan	-0.31%	-12.59%	0.83%	1.29%	6.05%
MSCI EAFE Index	-1.46%	-10.16%	2.06%	1.68%	5.97%
Over/(Under) Performance	1.15%	-2.43%	-1.23%	-0.39%	0.08%

Analysis of this data shows that, when the investment management fees of 70 BP are deducted, JP Morgan underperformed the benchmark during all time periods except for last quarter.

Based on direction from the Boards and input from staff, Callan completed an international fund manager search to replace JP Morgan and each of the Retirement Board Chairs appointed one member of their respective bargaining group to participate in the search committee.

On November 4, 2016 with the assistance of Anne Heaphy, Vice President in Callan's Fund Sponsor Consulting Group, and Andy Iseri, Senior Vice President and non-U.S. Equity Investment Consultant in Callan's Global Manager Research group, the search committee met to discuss three candidate firms recommended by Callan.

The committee meeting began with an overview of the Retirement Plans' current asset structure and fund managers. Mr. Iseri then provided a detailed review of each of the three candidate managers, providing background on staffing, returns, investment philosophy, risk, and other attributes. The search committee opted to move forward with Retirement Board interviews with two of the candidates: Lazard and Pyrford. See Attachment #1 for the search book prepared by Callan on these two firms.

Lazard is considered a value manager that focuses on return on equity (ROE). Per Mr. Iseri, investment managers that focus on ROE tend to have more stable returns, unless lower quality stocks are leading the market. Lazard is a fundamental bottom-up manager that was founded in 1970 and currently manages \$167.8 billion in assets across all of their funds. Lazard is headquartered in New York City, New York.

Pyrford is also considered a value manager with an absolute return approach. Per Mr. Iseri, Pyrford looks at dividend yield and earnings growth. Their core strategy is defensive and they look to position themselves to add value in a down market. Pyrford is headquartered out of London, England, with offices in the U.S., and currently manages \$11.1 billion in total. Pyrford offers two different investment vehicles as options for the Plans 1) a Mutual Fund and 2) the New Hampshire Investment Trust, characteristics of the investment vehicles are below:

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Agenda Item No.	Board Meeting Date	Open/Closed Session	Information/Action Item	lssue Date
1	02/01/17	Retirement	Action	12/28/16

# Subject: Receive International Fund Manager Candidate Presentations and Select Fund Manager (ALL). (Bernegger)

Organization / Product	Proposed Vehicle	Investment Minimum (mm)	<sup>1</sup> Fee on \$15mm (CF: mgmt/all-in)	Product Assets (mm)	<u>CF</u> Vehicle Assets (mm)	<u>CF</u> Entry / Exit Fees & Investor Protections	<u>CF</u> Liquidity/ Valuation	EM (%) 5 yr High   Low	Policy EM Maximum Limit
Pyrford International PLC Equity Only Non-U.S.	MF R6; BISGX	\$0	0.84%	¢2 510	\$623	2% if redeemed < 30 days	Daily	10.34%	20%
	New Hampshire Investment Trust	\$0	0.70% / 0.70%	\$3,510	\$425	None, although ADL may apply for significant transactions.		Hi: 12%   Lo: 8%	20%

The committee had constructive dialogue regarding which fund manager(s) should provide presentations to the full Retirement Boards. Pyrford and Lazard were the two top choices with a slight lean towards Pyrford due to down-market protection. Based on all the information presented and discussed, the committee felt it prudent to provide the Board with options. Therefore, the committee decided unanimously to invite Lazard Asset Management and Pyrford International PLC to make detailed presentations to the full Board for consideration.

At the original committee meeting, only the Equity Only Non-U.S. mutual fund Pyrford option was presented. Callan subsequently provided the New Hampshire Investment Trust option to staff. After further discussion, the committee requested that the Boards be presented with both of Pyrford's investment vehicle options.

See Attachment #2 for the Lazard presentation materials, Attachment #3 for Lazard's January outlook and Attachment #4 for the Pyrford presentation materials.

Upon completion of the fund manager candidate presentations, staff will seek action from the Boards to (a) direct staff to negotiate a contract with either Lazard or Pyrford for approval by the General Manager/CEO of Sacramento Regional Transit District or (b) make no changes such that JP Morgan would continue to serve as fund manager.

If the Boards opt to terminate JP Morgan and select either Lazard or Pyrford, staff and Callan will report back to the Boards on progress with their negotiations with the selected manager.

Adopted by the Board of Directors for the Retirement Plan for Sacramento Regional Transit District Employees Who Are Members of the ATU Local Union 256 on this date:

## February 1, 2017

## DIRECTING STAFF TO NEGOTIATE A CONTRACT WITH \_\_\_\_\_\_ USING THE \_\_\_\_\_\_ INVESTMENT VEHICLE TO PROVIDE INTERNATIONAL EQUITY FUND MANAGER SERVICES AND AUTHORIZING THE SACRAMENTO REGIONAL TRANSIT DISTRICT GENERAL MANAGER/CEO TO EXECUTE SAID CONTRACT, IN A FORM ACCEPTABLE TO LEGAL COUNSEL

BE IT HEREBY RESOLVED BY THE RETIREMENT BOARD OF DIRECTORS FOR THE RETIREMENT PLAN FOR SACRAMENTO REGIONAL TRANSIT DISTRICT EMPLOYEES WHO ARE MEMBERS OF THE ATU LOCAL UNION 256 AS FOLLOWS:

THAT, the Retirement Board staff is directed to negotiate a contract with to provide International Equity Fund Manager Services for investments of the Retirement Plan for Sacramento Regional Transit District Employees who are Members of the ATU Local Union 256, and that the General Manager/CEO of the Sacramento Regional Transit District is authorized to execute such contract, in a form acceptable to Legal Counsel, assuming use of the \_\_\_\_\_\_ investment vehicle and investment fees not to exceed \_\_\_\_\_\_.

RALPH NIZ, Chair

ATTEST:

Corina de la Torre, Secretary

By:

Adopted by the Board of Directors for the Retirement Plan for Sacramento Regional Transit District Employees Who Are Members of the IBEW Local Union 1245 on this date:

February 1, 2017

## DIRECTING STAFF TO NEGOTIATE A CONTRACT WITH \_\_\_\_\_\_ USING THE \_\_\_\_\_\_ INVESTMENT VEHICLE TO PROVIDE INTERNATIONAL EQUITY FUND MANAGER SERVICES AND AUTHORIZING THE SACRAMENTO REGIONAL TRANSIT DISTRICT GENERAL MANAGER/CEO TO EXECUTE SAID CONTRACT, IN A FORM ACCEPTABLE TO LEGAL COUNSEL

BE IT HEREBY RESOLVED BY THE RETIREMENT BOARD OF DIRECTORS FOR THE RETIREMENT PLAN FOR SACRAMENTO REGIONAL TRANSIT DISTRICT EMPLOYEES WHO ARE MEMBERS OF THE IBEW LOCAL UNION 1245 AS FOLLOWS:

THAT, the Retirement Board staff is directed to negotiate a contract with to provide International Equity Fund Manager Services for investments of the Retirement Plan for Sacramento Regional Transit District Employees who are Members of the ATU Local Union 256, and that the General Manager/CEO of the Sacramento Regional Transit District is authorized to execute such contract, in a form acceptable to Legal Counsel, assuming use of the \_\_\_\_\_\_ investment vehicle and investment fees not to exceed \_\_\_\_\_\_.

ERIC OHLSON, Chair

ATTEST:

Lorrin Burdick, Secretary

By:

Adopted by the Board of Directors for the Retirement Plan for Sacramento Regional Transit District Employees Who Are Members of the AEA on this date:

## February 1, 2017

## DIRECTING STAFF TO NEGOTIATE A CONTRACT WITH \_\_\_\_\_\_ USING THE \_\_\_\_\_\_ INVESTMENT VEHICLE TO PROVIDE INTERNATIONAL EQUITY FUND MANAGER SERVICES AND AUTHORIZING THE SACRAMENTO REGIONAL TRANSIT DISTRICT GENERAL MANAGER/CEO TO EXECUTE SAID CONTRACT, IN A FORM ACCEPTABLE TO LEGAL COUNSEL

BE IT HEREBY RESOLVED BY THE RETIREMENT BOARD OF DIRECTORS FOR THE RETIREMENT PLAN FOR SACRAMENTO REGIONAL TRANSIT DISTRICT EMPLOYEES WHO ARE MEMBERS OF THE AEA AS FOLLOWS:

THAT, the Retirement Board staff is directed to negotiate a contract with to provide International Equity Fund Manager Services for investments of the Retirement Plan for Sacramento Regional Transit District Employees who are Members of the ATU Local Union 256, and that the General Manager/CEO of the Sacramento Regional Transit District is authorized to execute such contract, in a form acceptable to Legal Counsel, assuming use of the \_\_\_\_\_\_ investment vehicle and investment fees not to exceed \_\_\_\_\_\_.

RUSSEL DEVORAK, Chair

ATTEST:

Sue Robison, Secretary

By:

Adopted by the Board of Directors for the Retirement Plan for Sacramento Regional Transit District Employees Who Are Members of the AFSCME on this date:

## February 1, 2017

## DIRECTING STAFF TO NEGOTIATE A CONTRACT WITH \_\_\_\_\_\_ USING THE \_\_\_\_\_\_ INVESTMENT VEHICLE TO PROVIDE INTERNATIONAL EQUITY FUND MANAGER SERVICES AND AUTHORIZING THE SACRAMENTO REGIONAL TRANSIT DISTRICT GENERAL MANAGER/CEO TO EXECUTE SAID CONTRACT, IN A FORM ACCEPTABLE TO LEGAL COUNSEL

BE IT HEREBY RESOLVED BY THE RETIREMENT BOARD OF DIRECTORS FOR THE RETIREMENT PLAN FOR SACRAMENTO REGIONAL TRANSIT DISTRICT EMPLOYEES WHO ARE MEMBERS OF THE AFSCME AS FOLLOWS:

THAT, the Retirement Board staff is directed to negotiate a contract with \_\_\_\_\_\_\_ to provide International Equity Fund Manager Services for investments of the Retirement Plan for Sacramento Regional Transit District Employees who are Members of the ATU Local Union 256, and that the General Manager/CEO of the Sacramento Regional Transit District is authorized to execute such contract, in a form acceptable to Legal Counsel, assuming use of the \_\_\_\_\_\_ investment vehicle and investment fees not to exceed \_\_\_\_\_\_.

CHARLES MALLONEE, Chair

ATTEST:

Rob Hoslett, Secretary

By:

Adopted by the Board of Directors for the Retirement Plan for Sacramento Regional Transit District Employees Who Are Members of the MCEG on this date:

## February 1, 2017

## DIRECTING STAFF TO NEGOTIATE A CONTRACT WITH \_\_\_\_\_\_ USING THE \_\_\_\_\_\_ INVESTMENT VEHICLE TO PROVIDE INTERNATIONAL EQUITY FUND MANAGER SERVICES AND AUTHORIZING THE SACRAMENTO REGIONAL TRANSIT DISTRICT GENERAL MANAGER/CEO TO EXECUTE SAID CONTRACT, IN A FORM ACCEPTABLE TO LEGAL COUNSEL

BE IT HEREBY RESOLVED BY THE RETIREMENT BOARD OF DIRECTORS FOR THE RETIREMENT PLAN FOR SACRAMENTO REGIONAL TRANSIT DISTRICT EMPLOYEES WHO ARE MEMBERS OF THE MCEG AS FOLLOWS:

THAT, the Retirement Board staff is directed to negotiate a contract with \_\_\_\_\_\_\_ to provide International Equity Fund Manager Services for investments of the Retirement Plan for Sacramento Regional Transit District Employees who are Members of the ATU Local Union 256, and that the General Manager/CEO of the Sacramento Regional Transit District is authorized to execute such contract, in a form acceptable to Legal Counsel, assuming use of the \_\_\_\_\_\_ investment vehicle and investment fees not to exceed \_\_\_\_\_\_.

MARK LONERGAN, Chair

ATTEST:

Roger Thorn, Secretary

By:

# Callan

January 2017

Sacramento Regional Transit District

Investment Manager Evaluation International Equity



## **Investment Manager Evaluation**

## **International Equity**

January 2017

The following investment manager organizations have submitted information to Callan regarding their investment management capabilities, for which information Callan has not necessarily verified the accuracy or completeness of or updated. The information provided to Callan has been summarized in this report for your consideration. Unless otherwise noted, performance figures reflect a commingled fund or a composite of discretionary accounts. All written comments in this report are based on Callan's standard evaluation procedures which are designed to provide objective comments based upon facts provided to Callan. Statements in this report are made as of the date they are expressed.

This report is for informational purposes only and should not be construed as legal or tax advice on any matter. Any decision you make on the basis of the content is your sole responsibility. You should consult with legal and tax advisers before applying any of this information to your particular situation. Reference to or inclusion in this report of any product, service or entity should not be construed as a recommendation, approval, affiliation or endorsement of such product, service or entity by Callan. Past performance is no guarantee of future results.



The following investment manager organizations have submitted information to Callan Associates Inc. regarding their investment management capabilities. The information has been summarized in this report for the consideration of the Sacramento Regional Transit District.

## **International Equity**

Lazard Asset Management

Pyrford International PLC

# Callan

## Sacramento Regional Transit District Investment Manager Evaluation

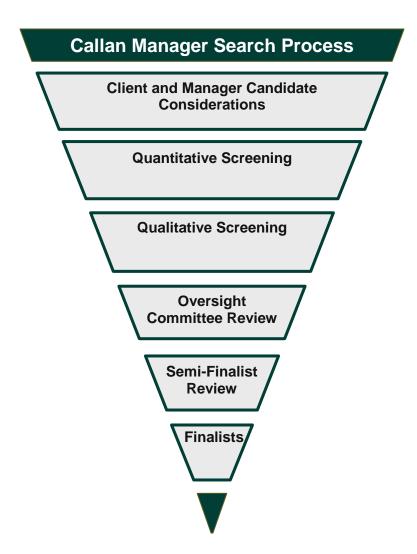
## **Table of Contents**

Search Outline Lazard Asset Management Pyrford International PLC Summary Matrix Comparative Manager Performance Appendix

Search Outline



## **Manager Search Process**



## **Manager Search Process Overview**

Callan's investment manager searches are underpinned by a disciplined, six-step process:

#### I. Identify Client and Manager Candidate Considerations

At the onset of each search, Callan meets with the client to review and document any specific characteristics sought in an investment manager. This includes factors such as the manager's strategy and approach, organizational structure, minimum/maximum assets under management, performance criteria relative to an appropriate index and peer group, and risk tolerance. These factors serve as the basis for developing the appropriate quantitative and qualitative screening criteria.

# Callan

## II. Conduct Quantitative Screening

After beginning with the broadest possible universe of candidates, Callan narrows the field using clientspecified screening criteria to screen our proprietary database. Screens examine numerous quantitative factors including performance, volatility, correlation with the existing structure, and assets under management. Callan screens performance across multiple time periods, market cycles, and statistical analyses so as to identify consistency of returns and avoid performance bias.

## III. Perform Qualitative Screening

Qualitative screening concentrates the field even further. Qualitative screens examine manager type, organizational history, depth and experience of investment personnel, investment process and style, client servicing capability and resource allocation. Callan generates qualitative assessments based on manager research conducted by our dedicated asset class specialists and generalist consultants through regular in-house meetings, conference calls, and on-site manager due diligence.

## IV. Oversight Committee Review of Preliminary Recommendations

Callan's Manager Search Committee—an oversight body that is comprised of more than a dozen senior consultants—reviews each search to thoroughly examine candidates and ensure Callan has met the client's specified criteria. Collectively, the Manager Search Committee vets the candidates and identifies semi-finalist candidates to present to the client.

## V. Review Semi-finalist Candidates

A manager evaluation document comparing the semi-finalist candidates is prepared for the client. Callan reviews the report with the client to highlight important considerations in conducting the search, compare and contrast the manager candidates, and assist in the identification of finalist candidates.

## **VI. Interview Finalists**

To gain additional insight, finalists are invited to present to the client. The presentations generally include an overview of the manager organization and a specific review of the product being considered. They also provide the opportunity for the client and/or consultant to address any outstanding issues. A winner is typically selected following these presentations.

#### Sacramento Regional Transit District Pension Plan MSCI WORLD ex-US Search Candidate Profile June 2016

#### A. Manager Orientation

Sacramento Regional Transit District ("RT") Pension Plan seeks an investment management firm with an expertise and proven record in managing international equity portfolios.

#### B. Manager Type

Only qualified investment counselor organizations registered under the Investment Advisors Act of 1940 will be considered. This includes investment counselors and investment counseling subsidiaries of banks, brokerage houses and insurance companies.

#### C. Investment Style

RT is seeking an international manager to replace its current active manager, JPMorgan EAFE Plus. RT would like to consider MSCI WORLD ex-US managers that would be complementary to their SSgA EAFE Index mandate. Managers will be allowed to have up to 15% exposure to the emerging markets but no more as RT has a dedicated EM mandate with DFA Emerging Markets Core. RT is also in the process of funding a developed international small cap mandate with AQR.

#### **D. Total Assets Under Management**

Managers should have a minimum of \$5.0 billion in assets under management at the firm, ideally with a stable and well-diversified client base.

#### E. Size of Professional Staff

There should be a sufficient number of client service and investment personnel relative to the firm's account load to assure that RT has reasonable access to the firm and that the investment portfolios are well attended.

#### F. Experience in Managing Funds

It is essential that candidates exhibit organizational stability and have compensation and ownership programs that provide reasonable assurance of their ability to retain key investment professionals. The organization should have been in business for a minimum of five years. Organizations with less than five-year history, however, may be considered in certain circumstances (e.g. spin-off from parent company).

#### G. Geographic Location

No preference.

#### **H. Investment Vehicles**

Institutional mutual fund or commingled trust.

#### I. Flexibility of Individual Portfolio Manager

Some flexibility of investment holdings is permissible among accounts; however, the dispersion of portfolio returns across accounts within the firm should be small. There should be a firm-wide investment process.

## J. In-House Research Capability

In-house research capability is preferred although limited outsourcing is acceptable.

#### K. Portfolio Risk Level

The candidates should have a risk level that is at least commensurate with the return achieved. Candidates should demonstrate risk-adjusted performance which compares favorably to the appropriate index and style group. Risk will be considered relative to the benchmark as well as in absolute returns.

#### L. Historical Performance Criteria

Historical performance criteria will be scored based on the following:

- Cumulative 4, 5 and 7 year data relative to the MSCI WORLD ex-US Index and CAI Non-U.S. Equity Style group
- Rolling three-year periods based on quarterly data compared to the MSCI WORLD ex-US Index and CAI Non-U.S. Equity Style group

Performance will be evaluated relative to each criteria; thus, there will be a maximum of 40 points possible (17 rolling three-year periods and 3 other cumulative periods). Candidates will receive one point for each standard passed. The relative score will be considered for candidates with limited performance history. Performance at a prior employer may be utilized on a case by case basis.

#### M. Client Servicing

The firm should be service-oriented and responsive to individual client needs. Portfolio managers and client service professionals should be capable of clearly articulating their investment process and explaining it through unfavorable markets. The portfolio manager, or well-qualified client service professional, must be available to answer questions and provide support in a timely basis upon request.

#### N. Qualities Specifically Sought

- Superior long-term out performance relative to peers and the benchmark
- Disciplined investment process
- Positive risk-adjusted returns
- Low turnover of personnel
- Effective communication skills

## O. Qualities to be Avoided

- Firms with current negative publicity
- Organizational instability
- Significant performance attributable to short periods of excess return
- Excessive recent growth in assets
- Concentrated client base

## P. Financial Well-Being of Firm

Must be successful in the business of money management. The firm should be professionally managed and have a long-range business plan. Principals should not have recently cashed out. The ideal firm will have strong monetary and/or equity incentives in place for the investment professionals.

## Q. Fees

RT seeks a competitive fee schedule that is commensurate with the firm's demonstrated expertise.

Lazard Asset Management

#### Lazard Asset Management 30 Rockefeller Plaza New York, NY 10112

#### History

In 1848, three brothers, Alexandre, Simon, and Lazard formed the company now known as Lazard Freres & Co. LLC (LF&Co.), in New Orleans and subsequently in San Francisco. In 1970, the firm established Lazard Asset Management (LAM) as its investment management division and registered with the SEC on May 1, 1970. On January 13, 2003, LAM reorganized and became a separate legal entity and subsidiary of LF&Co. On May 5, 2005, shares of Lazard Ltd, a newly formed Bermuda corporation, began trading publicly on the New York Stock Exchange (ticker: LAZ). As before the initial public offering, Lazard Group LLC continues to be the sole member of LF&Co., a New York limited liability company, which is the parent company of LAM.

#### Structure

Founded: 1970 Parent: Lazard Freres & Co. LLC (LF&Co.) Ownership: Publicly Owned Errors and omissions insurance: Yes In compliance with SEC and DOL: Yes GIPS Compliant: Yes

#### **Key Professionals**

Ashish Bhutani - CEO	
John Reinsberg - CIO of Global Equity	

Joined	Investment
Firm	Experience
2003	1985
1992	1981

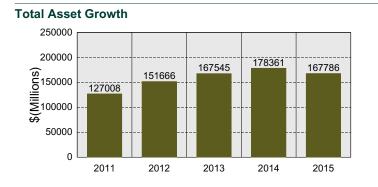
## New York, NY 10112 Phone: (212) 632-6566 Fax: (212) 332-5656 Email: robert.connin@lazard.com

Contact: Robert Connin

30 Rockefeller Plaza

#### **Employee Structure**

Client Services/Marketing	264
Dedicated Fundamental Analyst	103
Dedicated Quantitative Analyst	5
Executive Management	10
Operations	105
Portfolio Manager	146
System/Information Technology	35
Trader	15
Total	683



#### **Total Asset Structure**

Asset Type	\$(mm)	
U.S. Tax-Exempt	41,339	25%
U.S. Taxable	32,900	20%
Non-U.S.	54,341	32%
Mutual Fund	35,274	21%
Other	3,932	2%
Total	167,786	100%

#### U.S. Tax-Exempt Separate/Commingled Assets as of December 31, 2015

Asset Class	\$(mm)		Client Type	\$(mm)	
Domestic Balanced	376	1%	Corporate	8,130	20%
Domestic Broad Equity	5,308	13%	Endowment/Foundation	3,532	9%
Domestic Broad Fixed-Income	2,392	6%	Multi-Employer	3,711	9%
Intl Equity	30,093	73%	Public	18,533	45%
Intl/Global Balanced	302	1%	Insurance	1,021	2%
Intl/Global Fixed-Income	2,765	7%	High Net Worth	1,055	3%
Other Alternatives	104	0%	Other	5,357	13%
Total	41,339	100%	Total	41,339	100%

Note(s): Asset increase in 2012 was attributed to the gain of 107 accounts for \$8 billion. Asset growth in 2013 was attributed to the gain of 32 accounts for \$1.4 billion and market appreciation. Asset increase in 2014 was attributed to the gain of 32 accounts for \$1.4 billion and inflows into existing accounts. Asset decline in 2015 was attributed to the loss of 229 accounts for \$10 billion and market movement. "Other" assets denote mutual funds, commingled funds, and hedge funds.

## Lazard Asset Management International Equity As of December 31, 2015

Key Professionals	Joined	Investment
-	Firm	Experience
Michael Fry - PM	2005	1981
Michael Bennett - PM	1992	1986
Kevin Matthews - PM	2001	2001
Michael Powers - PM	1990	1990
John Reinsberg - PM	1992	1981

#### **Investment Professionals**

**Product Highlights:** 

**Investment Process:** 

Benchmark: MSCI EAFE

Investment Style: Intl Core Equity

10% Country/Regional Allocation

10% Industry/Sector Allocation

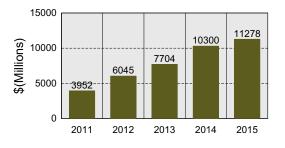
		5 Years	
Function	#	Gained	Lost
Central Research Analyst	57		
Portfolio Manager	5	1	0
Portfolio Decision: Team Management			

Invest. Strategy: Fundamental Research (100% Bottom Up)

#### Total Asset Structure Asset Type

Asset Type	\$(mm)	
U.S. Tax-Exempt Commingled	519	5%
U.S. Tax-Exempt Sep Acct	6,639	59%
U.S. Taxable	2,397	21%
Non-U.S.	172	2%
Mutual Fund	1,552	14%
Total	11,278	100%

#### **Total Asset Growth**



#### **U.S. Tax-Exempt Assets**

Vehicle	Largest Acct			5 Years Net Flows
Commingled	478	2	519	0
Separate	1,909	35	6,639	47

Fee Schedule: See Summary Matrix

80% Security Selection	
	Year
Portfolio Characteristics	End
Wtd Avg Market Cap (\$M)	50,780
% Large Cap (\$wgt) > \$15 B	68
% Mid Cap (\$wgt) \$3.5 - \$15 B	27
% Small Cap (\$wgt) \$700M - \$3.5 B	5
Number of Holdings	63
Annual Percent Turnover	35
Total Emerg. Mkts Exposure	5

Performance	Composite
I enominance	Composite

Assets in composite (\$mm): 5,561 Number of Accts in Composite: 11 2015 Annual Dispersion Range: Composite Return: 2.40% Highest Return: 2.93% Lowest Return: 2.15%

Note(s): Due to the recent inception of the proposed commingled vehicle (launched in 1Q15), performance represents the composite, gross-of-fees. Policy maximum to Emerging Market exposure is 10%. Portfolio manager Kevin Matthews joined the strategy in March 2013. Lazard's total International Equity strategy AUM, above, includes the following strategies Int'l Equity, Int'l Equity (ACW ex-US), Int'l Equity Plus, Int'l Equity Plus, Int'l Equity Plus (ACW ex-US), and Int'l Equity ex-EM. Asset increase in 2012 was attributed to inflows into existing accounts and market appreciation. Asset growth in 2014 was attributed to the net gain of 17 accounts as well as inflows into existing accounts. US exposure on page 7 represents companies domiciled in the United States who derive the majority of their assets, revenues, or business from international markets.

## Lazard Asset Management International Equity

#### Investment Philosophy:

The Lazard International Equity strategy seeks to generate strong relative returns over a full market cycle by investing in companies with strong and/or improving financial productivity at attractive valuations. The strategy typically invests in non-US companies, including those from emerging markets, with a market capitalization generally of \$3 billion or greater. EAFE and ACWI ex-US benchmarked versions are available, resulting in different emerging markets exposure. A version that excludes emerging markets is also available.

#### **Research Process:**

The research process is approximately 20% quantitative, but it does not use quantitative models. Lazard employs various screening processes to search global databases for companies that appear to offer strong financial productivity at attractive valuations. Screening seeks to identify companies that are attractively priced (i.e., low price/earnings, price/book and price/cash flow), relative to their financial returns (i.e., return on equity, cash return on equity, return on assets, operating margins). Screening also eliminates stocks that do not have sufficient liquidity to be included in a portfolio. Quantitative processes are used to provide insight to the portfolio management teams for risk management purposes. Optimization programs (BARRA Aegis, Northfield Optimizer, GRAM, Style Research) can be used by Lazard to identify and quantify portfolio risk. The portfolio management teams may limit exposure to various measures of risk including: industries, sectors, countries, and style characteristics (such as large or small cap bias). Individual security exposure is also limited to control risk and maintain liquidity.

#### **Country Strategy:**

Country weightings are a residual of Lazard's stock selection process.

#### **Security Selection:**

In searching for under-valued, under-appreciated and financially productive stocks, the team follows an investment process that incorporates different types of research, as well as other investment selection techniques: idea sourcing and fundamental research (return analysis, accounting validation, modeling and valuation). The results from their return analysis and accounting validation are incorporated in the construction of a set of expectations for future cash flows and profitability. In each scenario, they value the company. Stocks are selected by the portfolio management team from the wide range of ideas generated by the team and the investment platform. Stocks tend to fall into one of three broad categories: mispriced, compounders and restructuring.

#### **Portfolio Construction:**

Portfolio construction is driven by stock selection. The International Equity portfolio management team builds the portfolio selecting one stock at a time with inclusion of a stock in the portfolio primarily dependent on a new idea's attractiveness relative to existing portfolio holdings. Sector and regional exposures are a residual of the investment process. In addition, consideration is given to the impact the stocks inclusion may have on portfolio structure and risk metrics as well as any client specific mandate. The process is ongoing with formal and informal research and portfolio construction discussions held throughout the week. Idea sourcing, fundamental analysis and portfolio construction is a collegiate process involving all members of the portfolio management team; however the lead portfolio manager is ultimately responsible for investment decisions. The objective is to construct a portfolio which achieves the investment objectives and adheres to the investment philosophy and process detailed above. Portfolio construction utilizes risk analysis tools and processes to analyze portfolios to understand portfolio risk exposures and avoid any unintended risk concentrations.

#### **Currency Strategy:**

Lazard does not seek to actively manage currency, and does not typically engage in hedging. As part of the risk management process, they seek to ensure that the portfolio is not unduly concentrated in securities denominated in specific currencies or whose business is heavily exposed to adverse movements. However, the team attempts to add value through in-depth analysis of individual companies and not through forecasting complex macroeconomic relationships such as currency rates. Company analysis takes into account the effects of macroeconomic and currency effects.

#### Sell Discipline:

The sell discipline is an equally important component in the investment process. A review of existing portfolio holdings is triggered when a new idea offers more attractive risk/reward; the price performance objective has been achieved; or the fundamental investment assumptions change and the investment thesis is invalidated. While the fundamental research process is highly collaborative, the portfolio management team makes the final determination of what gets bought and sold in the portfolio.

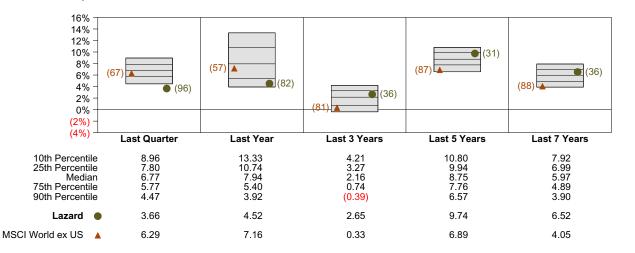


## Lazard Asset Management International Equity Return Analysis Summary

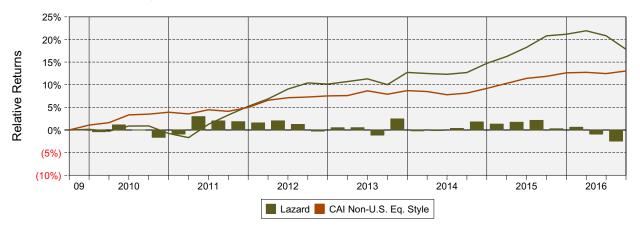
#### **Return Analysis**

The graphs below analyze the manager's return on both a risk-adjusted and unadjusted basis. The first chart illustrates the manager's ranking over different periods versus the appropriate style group. The second chart shows the historical quarterly and cumulative manager returns versus the appropriate market benchmark. The last two charts illustrate the manager's ranking relative to their style using various risk-adjusted return measures and returns for rising/declining periods.

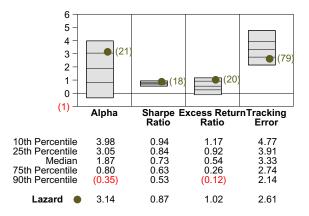
#### Performance vs CAI Non-U.S. Equity Style (Gross) Periods ended September 30, 2016



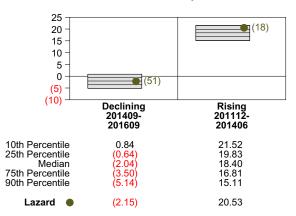
#### Cumulative and Quarterly Relative Return vs MSCI World ex US



#### Risk Adjusted Return Measures vs MSCI World ex US Rankings Against CAI Non-U.S. Equity Style (Gross) Five Years Ended September 30, 2016



#### Returns for Intl. Rising/Declining Periods Five Years Ended September 30, 2016

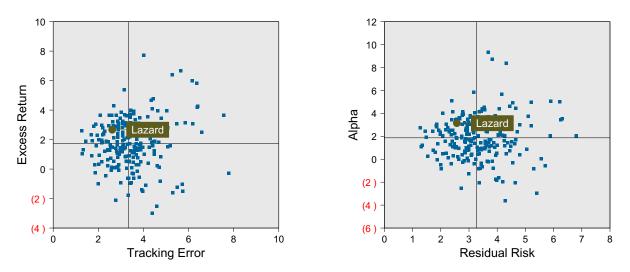


## Lazard Asset Management International Equity Risk Analysis Summary

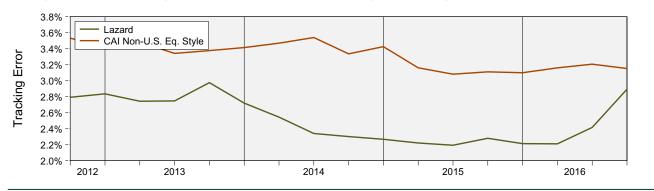
#### **Risk Analysis**

The graphs below analyze the risk or variation of a manager's return pattern. The first scatter chart illustrates the relationship, called Excess Return Ratio, between excess return and tracking error relative to the benchmark. The second scatter chart displays the relationship, sometimes called Information Ratio, between alpha (market-risk or "beta" adjusted return) and residual risk (non-market or "unsystematic" risk). The third chart shows tracking error patterns versus the benchmark over time. The last two charts show the ranking of the manager's risk statistics versus the peer group.

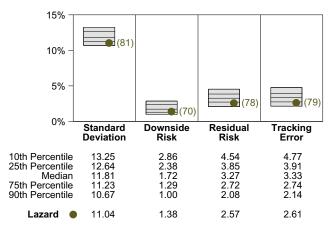
Risk Analysis vs CAI Non-U.S. Equity Style (Gross) Five Years Ended September 30, 2016

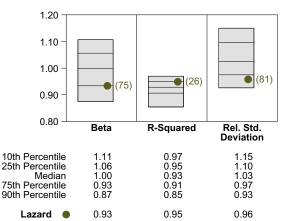




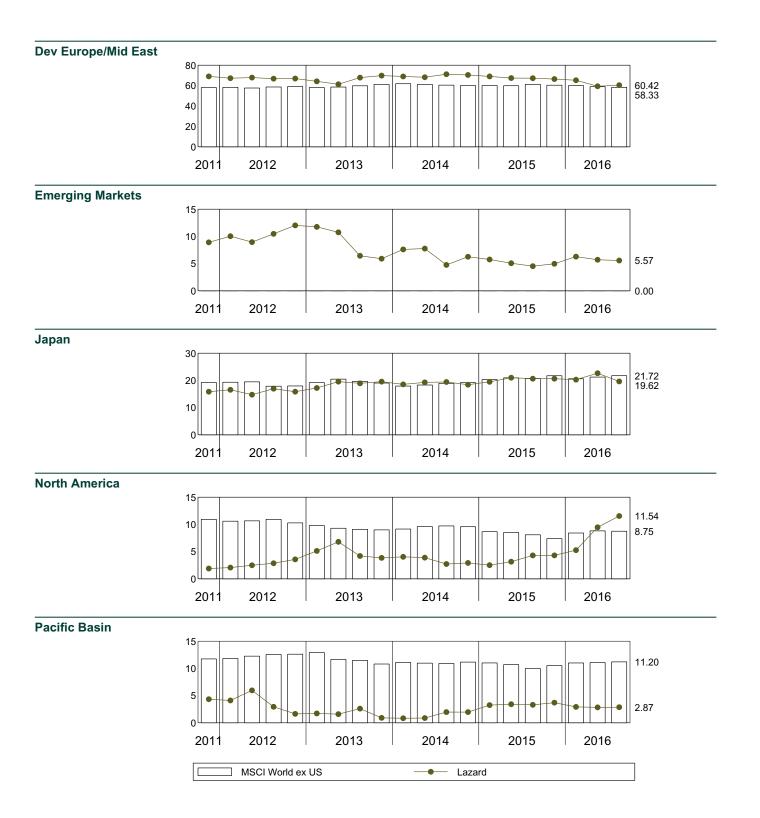








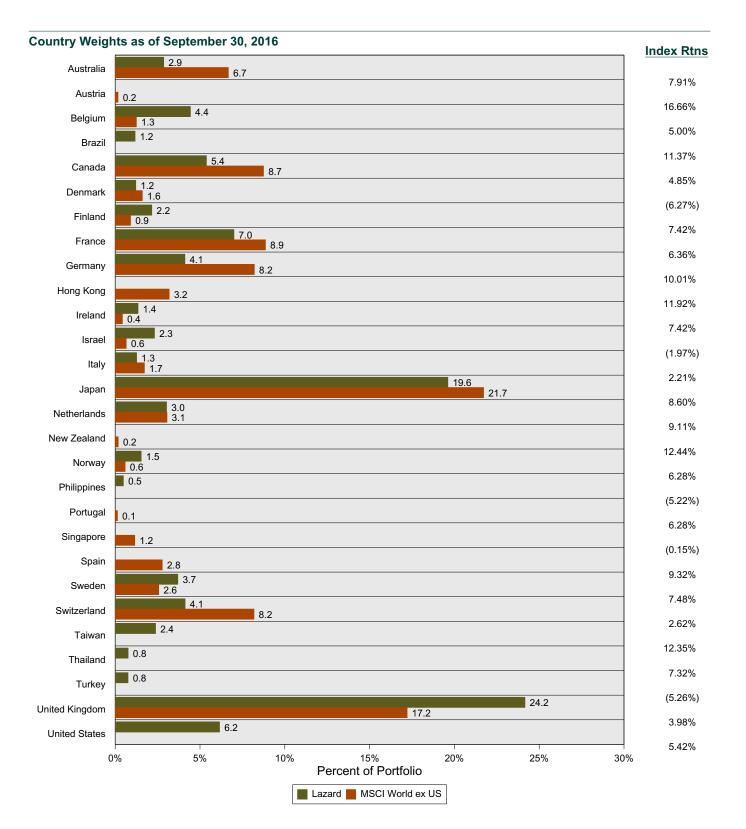
## Lazard Asset Management History of Ending Regional Weights Period Ended September 30, 2016



## Country Allocation Lazard VS MSCI World ex US Index (USD Net Div)

#### **Country Allocation**

The chart below contrasts the portfolio's country allocation with that of the index as of September 30, 2016. This chart is useful because large deviations in country allocation relative to the index are often good predictors of tracking error in the subsequent quarter. To the extent that the portfolio allocation is similar to the index, the portfolio should experience more "index-like" performance. In order to illustrate the performance effect on the portfolio and index of these country allocations, the individual index country returns are also shown.



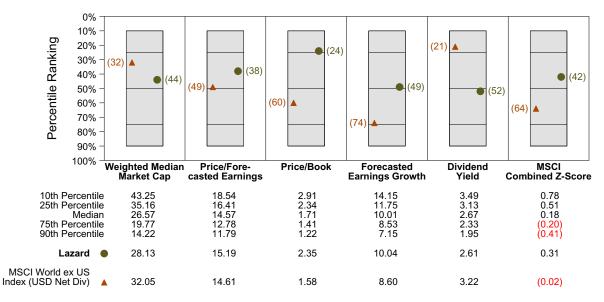
Callan

### Lazard Asset Management International Equity Equity Characteristics Analysis Summary

#### **Portfolio Characteristics**

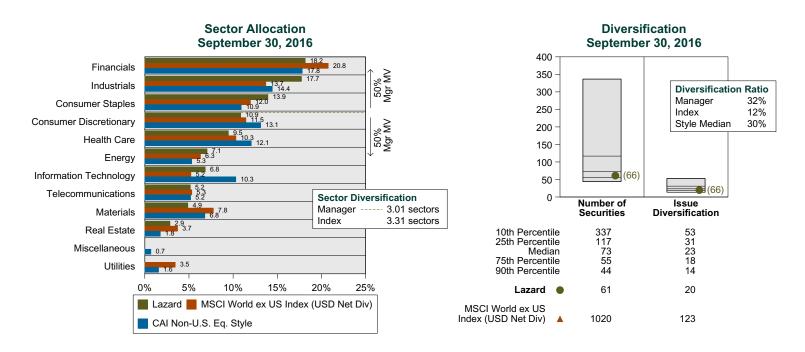
This graph compares the manager's portfolio characteristics with the range of characteristics for the portfolios which make up the manager's style group. This analysis illustrates whether the manager's current holdings are consistent with other managers employing the same style.

#### Portfolio Characteristics Percentile Rankings Rankings Against CAI Non-U.S. Equity Style as of September 30, 2016



#### **Sector Weights**

The graph below contrasts the manager's sector weights with those of the benchmark and median sector weights across the members of the peer group. The magnitude of sector weight differences from the index and the manager's sector diversification are also shown. Diversification by number and concentration of holdings are also compared to the benchmark and peer group. Issue Diversification represents by count, and Diversification Ratio by percent, the number of holdings that account for half of the portfolio's market value.

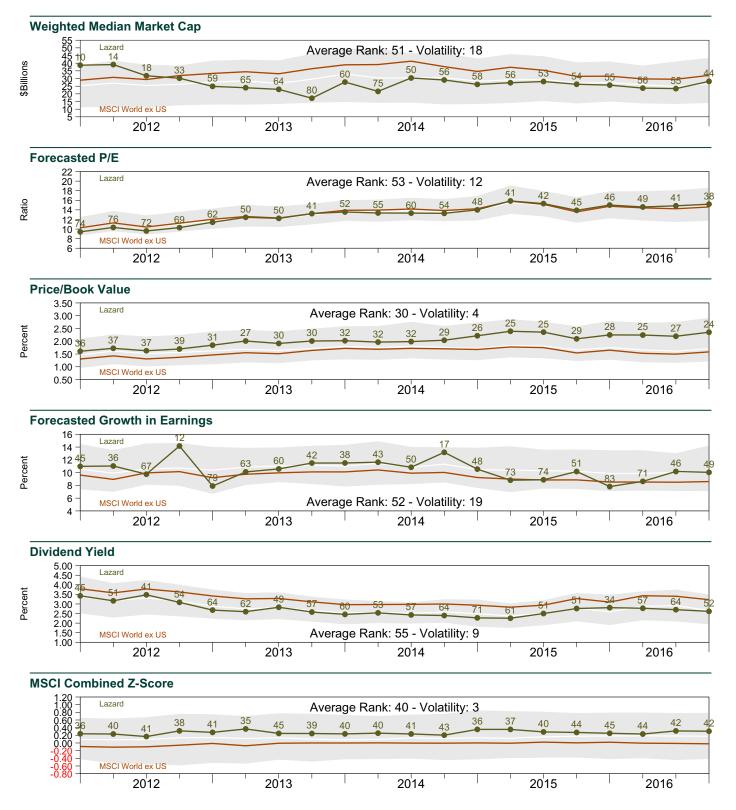




## **Portfolio Characteristics Analysis**

#### CAI Non-U.S. Eq. Style

The charts below illustrate the behavior of the product over different portfolio characteristics through time. As a backdrop the range (from 10th to 90th percentile) is shown for the CAI Non-U.S. Eq. Style Universe. The ranking of the product in this group is shown above each quarter end dot. The average ranking of the product and, if there are at least 12 data points, the standard deviation of that ranking is also shown on the chart. The MSCI World ex US is shown for comparison purposes.



Any particular portfolio characteristic observation(s) may be missing due to a failure to pass a minimum "coverage hurdle" intended to ensure quality. This can occur when the portfolio has a significant weight in stocks for which the data vendor(s) cannot supply the particular relevant financial metric.

Pyrford International PLC

## Pyrford International PLC 79 Grosvenor Street London, GBR W1K-3JU

#### History

Pyrford International PLC began in 1982 as the in-house manager of the multi-national group ElderIXL Ltd. Australia. It moved the headquarters to London in 1987 and was purchased in a management buy-out in 1991. A marketing/client service office was opened in New York that same year. The Australia and New Zealand offices were sold in 1994. Pyrford has been registered with the SEC since 1989 and gained the first tax-exempt US client in 1993. Pyrford's ultimate parent company is Pyrford Capital Ltd. which is owned 40% by key employees and 40% by Euro Equity Holdings SA, a European investment company. In addition, a 20% stake is held by Strategic Investment Group Ventures, a joint venture between CalPERS Manager Development Program and Strategic Investment Group. In December 2007, Bank of Montreal Capital Markets (Holdings) Limited, a company within the BMO Financial Group (being Bank of Montreal and its subsidiaries), acquired 100% of the share capital of Pyrford International.

#### Structure

Founded: 1987 Parent: BMO Financial Group Ownership: Other Errors and omissions insurance: Yes In compliance with SEC and DOL: Yes GIPS Compliant: Yes

#### **Key Professionals**

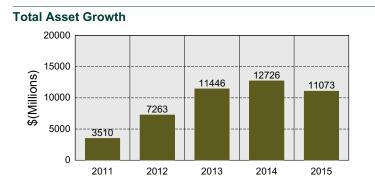
Tony Cousins - CEO, CIO	
Drew Newman - COO	

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984
986

Contact: Simon Phillips 95 Wigmore Street London, GBR W1U 1FD Phone: +44 207 399 2242 Fax: +44 207 399 2205 Email: simon.phillips@pyrford.co.uk

#### Employee Structure

Client Services/Marketing	5
Dedicated Fundamental Analyst	4
Economist	1
Executive Management	3
Portfolio Manager	8
Trader	2
Total	23



#### **Total Asset Structure**

<b>Asset Type</b> U.S. Tax-Exempt U.S. Taxable Non-U.S.	<b>\$(mm)</b> 1,497 636 6,788	14% 6% 61%
Mutual Fund	2,153	19%
Total	11,073	100%

#### U.S. Tax-Exempt Separate/Commingled Assets as of December 31, 2015

Asset Class	\$(mm)	
Intl Equity	1,497	100%
Total	1,497	100%

Client Type	\$(mm)	
Corporate	1,150	77%
Endowment/Foundation	126	8%
Public	215	14%
Sub-Advised	6	0%
Total	1,497	100%

Note(s): Tony Cousins took over as CEO and CIO in January 2011, replacing Bruce Campbell who ultimately retired in March 2015. In January 2014, Tony Cousins expanded his responsibilities temporarily to assume the position of CEO for Lloyd George Management (LGM), which is also part of BMO Global Asset Management. In November 2014, Cousins relinquished his role as CEO of LGM to focus on Pyrford as its CEO and CIO. Asset growth in 2012 was attributed to the gain of 34 accounts for \$2.0 billion and market appreciation. Asset growth in 2013 was attributed to the gain of 30 accounts for \$1.3 billion and market appreciation. Asset growth in 2015 was attributed to the loss of 13 accounts for \$1.4 billion.



## Pyrford International PLC Equity Only Non-U.S. As of December 31, 2015

Key Professionals		Investment Experience
Tony Cousins - PM	1989	1984
Daniel McDonagh - PM	1997	1997
Paul Simons - PM	1996	1996
Stefan Bain - PM	2012	2001
Nabil Irfan - PM	2005	2000
Peter Moran - PM	2003	2003
Jun Yu - PM	2008	2000

#### **Investment Professionals**

		5 Years		
Function	#	Gained	Lost	
Portfolio Manager	7	1	3	
Portfolio Decision: Team Management				

#### **Product Highlights:**

Investment Style: Intl Value

Benchmark: MSCI EAFE

Market Value (\$mm): 655

Invest. Strategy: Fundamental Research/Risk Control (Bottom Up/Top Down Overlay)

#### **Investment Process:**

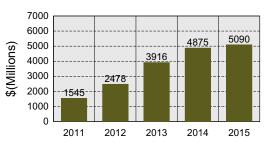
50% Country/Regional Allocation 50% Security Selection

	Year
Portfolio Characteristics	End
Wtd Avg Market Cap (\$M)	52,752
% Large Cap (\$wgt) > \$15 B	63
% Mid Cap (\$wgt) \$3.5 - \$15 B	29
% Small Cap (\$wgt) \$700M - \$3.5 B	8
Number of Holdings	74
Annual Percent Turnover	13
Total Emerg. Mkts Exposure	11

#### **Total Asset Structure**

Asset Type	\$(mm)	
U.S. Tax-Exempt Commingled	660	13%
U.S. Tax-Exempt Sep Acct	519	10%
U.S. Taxable	636	12%
Non-U.S.	1,121	22%
Mutual Fund	2,153	42%
Total	5,090	100%

#### **Total Asset Growth**



#### **U.S. Tax-Exempt Assets**

Vehicle	Largest Acct	# of Accts		5 Years Net Flows
Commingled	100	19	660	98
Separate	177	6	519	224

#### Fee Schedule: See Summary Matrix

Vehicle Information

Annual 2015 Return: (3.16%)

Note(s): Performance represents the mutual fund, gross-of-fees. Due to its short track record the performance composite is shown in the performance section as supplemental information. In April 2016 Roderick Lewis was promoted from analyst to portfolio manager. Portfolio manager Bruce Campbell retired in March 2015. Japan portfolio manager, Paul Heaton, retired at the end of April 2012 and was subsequently replaced by Stefan Bain in June 2012. Portfolio manager Geraldine Arrigoni left the firm in September 2013. Asset growth in 2012 was attributed to the gain of four accounts for \$426 million and market appreciation. Asset growth in 2013 was attributed to the gain of five accounts for \$758 million and market appreciation. Asset increase in 2014 was attributed to the gain of five accounts for \$542 million and fund inflows into existing accounts. Performance dispersion between the mutual fund and composite in the first half of 2016 was due to pricing source differences and cash flows.

# Pyrford International PLC Equity Only Non-U.S.

#### Investment Philosophy:

Pyrford's investment strategy is based on a value-driven, absolute return approach, with both top-down and bottom-up elements. At the country level they seek to invest in countries that offer an attractive market valuation relative to their long-term prospects. At the stock level they identify companies that offer excellent value relative to in-house forecasts of long-term (5 years) earnings growth. This approach is characterized by low absolute volatility and downside protection.

#### **Research Process:**

Internally generated research accounts for approximately 70% of the total research effort. The Chief Executive Officer concentrates on macro research; the portfolio managers assisted by regional analysts are engaged in both economic and stock research. Company visits are a key contribution to the build-up of the fundamental macro story. In addition to visiting companies, the investment professionals visit government departments, central banks, economists and local brokers. To supplement the work conducted internally, Pyrford subscribes to Marc Faber, Lombard Street Research and Smithers & Co Ltd. These help challenge Pyrford's internal work and provide a useful sounding board. For statistical data Pyrford utilizes Thomson Datastream. This gives access to national government statistical sources plus the IMF, OECD, and other databases.

#### Country Strategy:

Country allocation decisions are made by the Investment Strategy Committee, which meets a minimum of once a month. Country allocations are made on a comparative value basis utilizing an internally generated Equity Valuation Matrix. This process produces a value indicator for each market. They will invest in those markets offering the best value.

#### Security Selection:

The stock selection process includes two separate strands. The first step is an in-depth historical analysis of the company's balance sheet and earnings statements, focusing on a number of key ratios, including Du Pont analysis of return on equity (ROE). The output leaves out companies with levels of ROE driven by excessive leverage and prefers those who generate returns through asset turnover and net profit margin. Each analyst or portfolio manager is responsible for compiling and processing data directly from financial statements. The end result is a standard stock sheet for every company under investigation. Before a decision is made to invest in a company, an in-depth interview with management is conducted to discuss the competitive environment and the ability of the firm's business model to continue to generate an attractive return on equity. Hurdle rates utilized for the reinvestment of retained capital in the business are also scrutinized in detail. Every stock in a Pyrford portfolio is visited in this way before purchase and subsequently on an annual basis. Security selection centers on the formula: dividend yield + Pyrford's forecast 5 year EPS growth. Stocks which do not meet Pyrford's quality and value criteria involving market liquidity, corporate governance, leverage, interest cover etc, will already have been filtered out.

#### **Portfolio Construction:**

The first step is deciding the country allocation, done by the Investment Strategy Committee. The stocks in each country are then selected by the regional teams. Once securities have been identified as suitable for investment, stock weights within each country portfolio are determined after further consideration of the following: the long-term value assessment for each stock (dividend yield plus Pyrford's forecast five year EPS growth), the confidence levels around forecasts made, and the liquidity of each stock.

#### **Currency Strategy:**

Pyrford takes a defensive posture toward foreign exchange. Their objective is for currency to produce neutral to slightly positive returns. The assessment of whether to hedge is based on the foreign currency's value relative to its purchasing power parity equilibrium level versus the base currency. Subject to client constraints and specified benchmark, their policy is to hedge foreign currencies which are overvalued by more than 10% relative to the base currency or where there is a specific event related risk. Up to 100% of the exposure in a particular foreign currency may be hedged.

#### Sell Discipline:

All portfolio holdings are continuously monitored by the relevant regional specialist portfolio manager. Generally, stocks are sold for three reasons: 1. The company's share price rises to such an extent that the sum of its dividend yield and forecast long term earnings per share growth falls to a level below that of the local market or alternative stocks within that market. 2. Changes occur in company strategy or industry which in Pyrford's view will affect its long term ability to generate adequate long term earnings per share growth or 3. Pyrford has made a country allocation change and decided to no longer maintain client funds in the country.

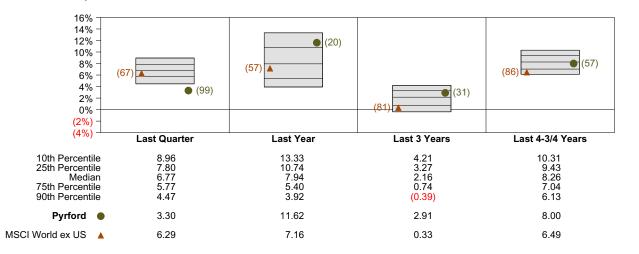


## Pyrford International PLC Equity Only Non-U.S. Return Analysis Summary

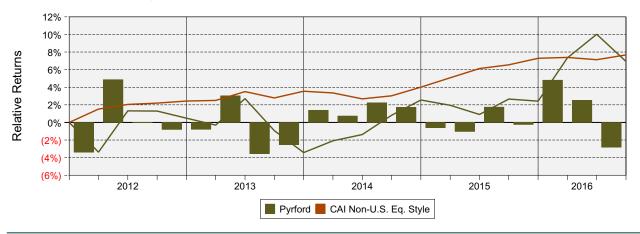
#### **Return Analysis**

The graphs below analyze the manager's return on both a risk-adjusted and unadjusted basis. The first chart illustrates the manager's ranking over different periods versus the appropriate style group. The second chart shows the historical quarterly and cumulative manager returns versus the appropriate market benchmark. The last two charts illustrate the manager's ranking relative to their style using various risk-adjusted return measures and returns for rising/declining periods.

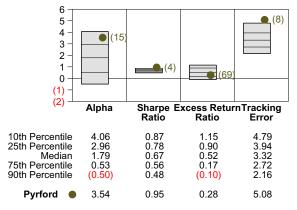
#### Performance vs CAI Non-U.S. Equity Style (Gross) Periods ended September 30, 2016



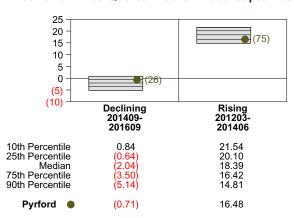
#### Cumulative and Quarterly Relative Return vs MSCI World ex US



#### Risk Adjusted Return Measures vs MSCI World ex US Rankings Against CAI Non-U.S. Equity Style (Gross) Four and Three-Quarter Years Ended September 30, 2016



#### Returns for Intl. Rising/Declining Periods Four and Three-Quarter Years Ended September 30, 2016

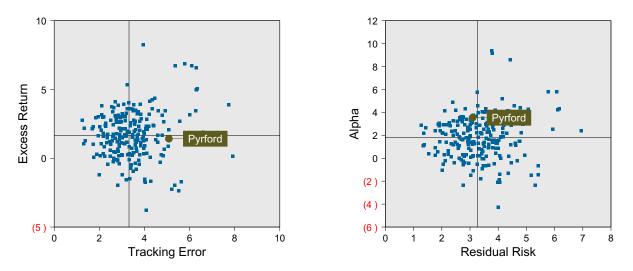


## Pyrford International PLC Equity Only Non-U.S. Risk Analysis Summary

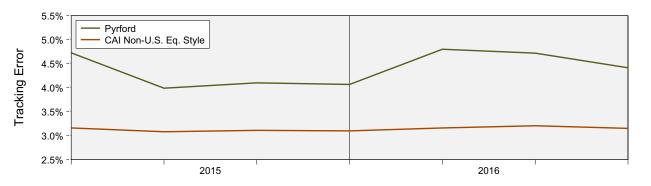
#### **Risk Analysis**

The graphs below analyze the risk or variation of a manager's return pattern. The first scatter chart illustrates the relationship, called Excess Return Ratio, between excess return and tracking error relative to the benchmark. The second scatter chart displays the relationship, sometimes called Information Ratio, between alpha (market-risk or "beta" adjusted return) and residual risk (non-market or "unsystematic" risk). The third chart shows tracking error patterns versus the benchmark over time. The last two charts show the ranking of the manager's risk statistics versus the peer group.

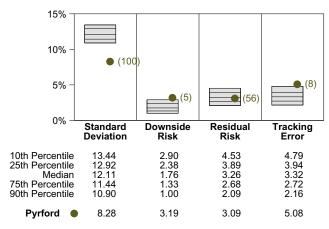
#### Risk Analysis vs CAI Non-U.S. Equity Style (Gross) Four and Three-Quarter Years Ended September 30, 2016

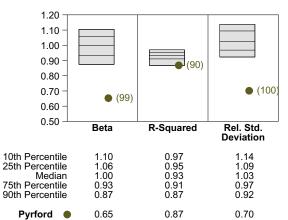




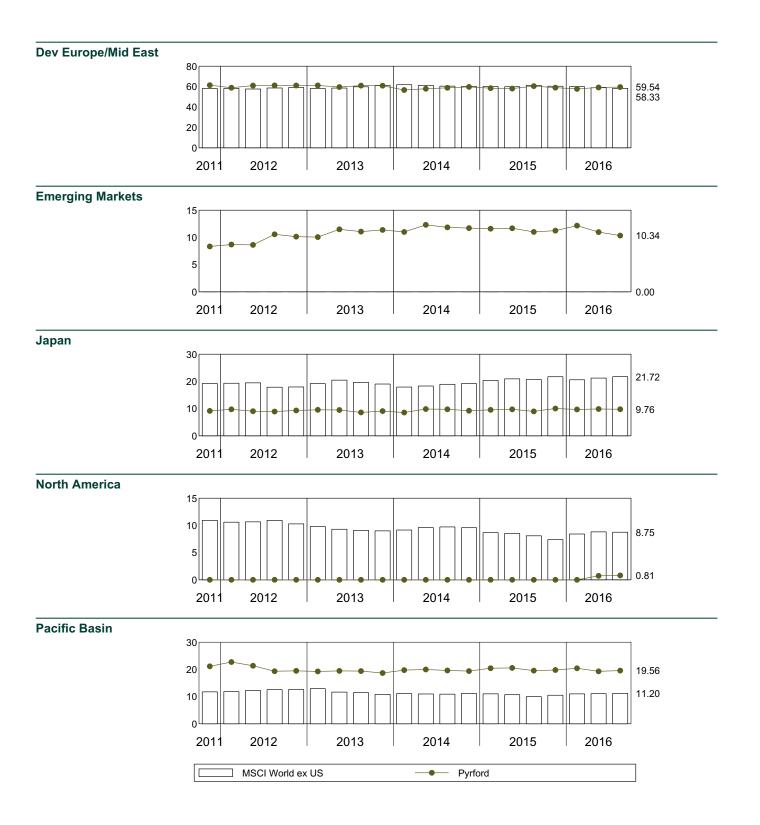








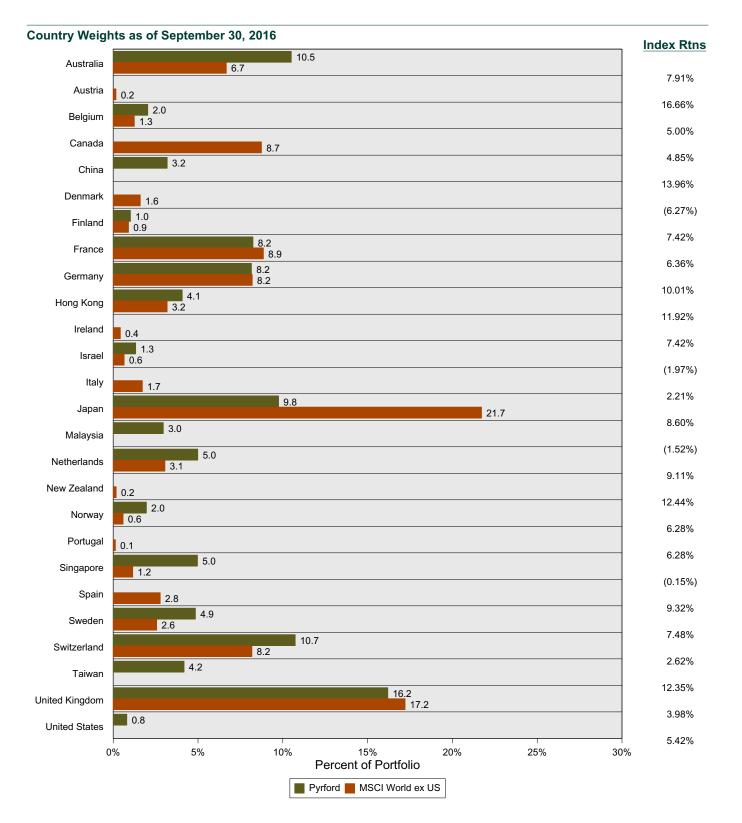
#### Pyrford International PLC History of Ending Regional Weights Period Ended September 30, 2016



#### Country Allocation Pyrford VS MSCI World ex US Index (USD Net Div)

#### **Country Allocation**

The chart below contrasts the portfolio's country allocation with that of the index as of September 30, 2016. This chart is useful because large deviations in country allocation relative to the index are often good predictors of tracking error in the subsequent quarter. To the extent that the portfolio allocation is similar to the index, the portfolio should experience more "index-like" performance. In order to illustrate the performance effect on the portfolio and index of these country allocations, the individual index country returns are also shown.

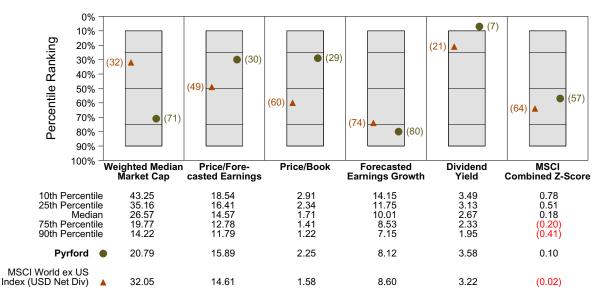


#### Pyrford International PLC Equity Only Non-U.S. Equity Characteristics Analysis Summary

#### **Portfolio Characteristics**

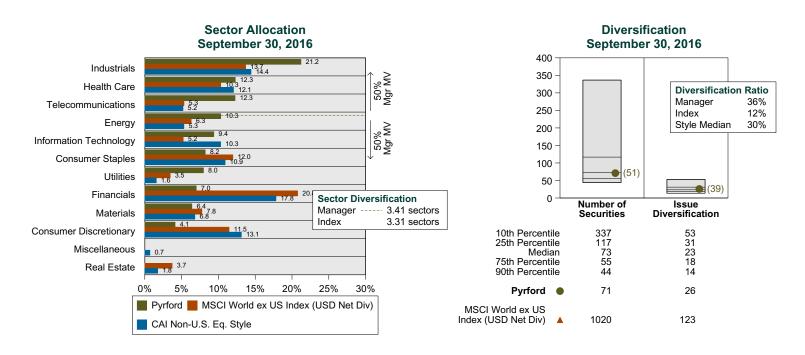
This graph compares the manager's portfolio characteristics with the range of characteristics for the portfolios which make up the manager's style group. This analysis illustrates whether the manager's current holdings are consistent with other managers employing the same style.

#### Portfolio Characteristics Percentile Rankings Rankings Against CAI Non-U.S. Equity Style as of September 30, 2016



#### **Sector Weights**

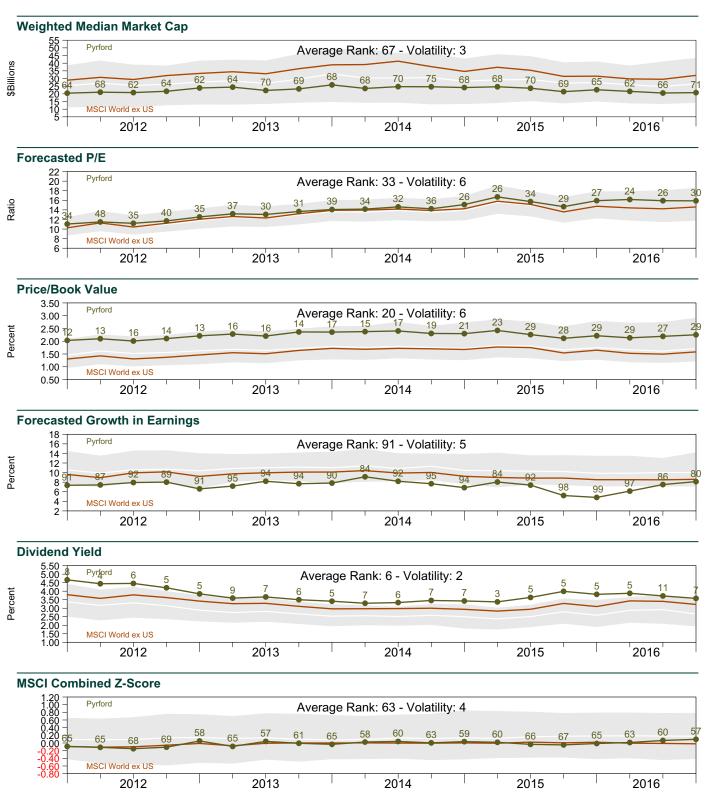
The graph below contrasts the manager's sector weights with those of the benchmark and median sector weights across the members of the peer group. The magnitude of sector weight differences from the index and the manager's sector diversification are also shown. Diversification by number and concentration of holdings are also compared to the benchmark and peer group. Issue Diversification represents by count, and Diversification Ratio by percent, the number of holdings that account for half of the portfolio's market value.



#### **Portfolio Characteristics Analysis**

#### CAI Non-U.S. Eq. Style

The charts below illustrate the behavior of the product over different portfolio characteristics through time. As a backdrop the range (from 10th to 90th percentile) is shown for the CAI Non-U.S. Eq. Style Universe. The ranking of the product in this group is shown above each quarter end dot. The average ranking of the product and, if there are at least 12 data points, the standard deviation of that ranking is also shown on the chart. The MSCI World ex US is shown for comparison purposes.



Any particular portfolio characteristic observation(s) may be missing due to a failure to pass a minimum "coverage hurdle" intended to ensure quality. This can occur when the portfolio has a significant weight in stocks for which the data vendor(s) cannot supply the particular relevant financial metric.

Summary Matrix

Organization / Product	Proposed Vehicle	Investment Minimum (mm)	<sup>1</sup> Fee on \$15mm (CF: mgmt/all-in)	Product Assets (mm)	<u>CF</u> Vehicle Assets (mm)	<u>CF</u> Entry / Exit Fees & Investor Protections	<u>CF</u> Liquidity/ Valuation		Policy EM Maximum Limit	Notes
Lazard Asset Management International Equity	CIT	*\$25	0.70% / 0.80%	\$13,447	\$686	1% if redeemed < 30 days	Daily	5.57% Hi: 12%   Lo: 5%	10%	*Lazard will waive the investment minimum.
Pyrford International PLC	MF R6; BISGX	\$0	0.84%	¢2 510	\$623	2% if redeemed < 30 days	Daily	10.34%		
Equity Only Non-U.S.	New Hampshire Investment Trust	\$0	0.70% / 0.70%	\$3,510	\$425	None, although ADL may apply for significant transactions.		Hi: 12%   Lo: 8%	20%	

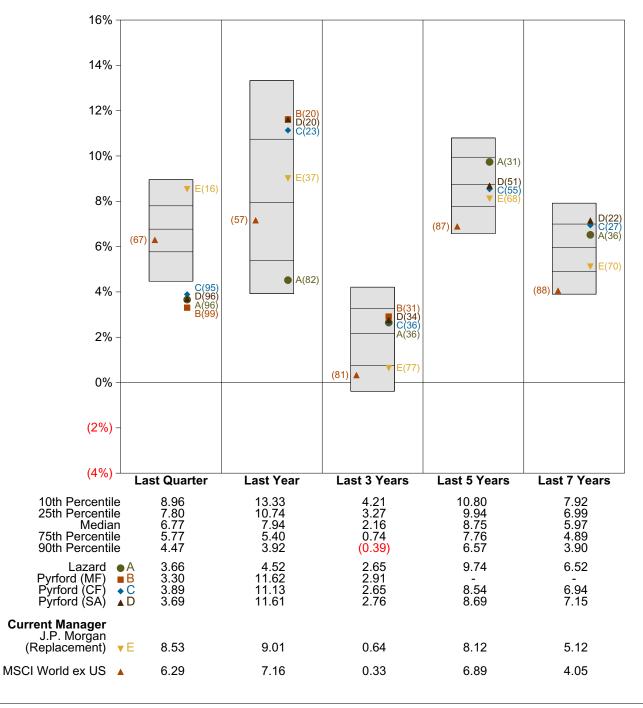
<sup>1</sup>Stated fees represent best estimates by candidate firms as of 1/05/17 based on general assumptions provided for this mandate and are subject to further negotiation.

Comparative Manager Performance

#### Sacramento Regional Transit District Performance vs CAI Non-U.S. Equity Style Periods Ended September 30, 2016

#### **Return Ranking**

The chart below illustrates fund rankings over various periods versus the CAI Non-U.S. Equity Style. The bars represent the range of returns from the 10th percentile to the 90th percentile for each period for all funds in the CAI Non-U.S. Equity Style. The numbers to the right of the bar represent the percentile rankings of the funds being analyzed. The table below the chart details the rates of return plotted in the graph above.



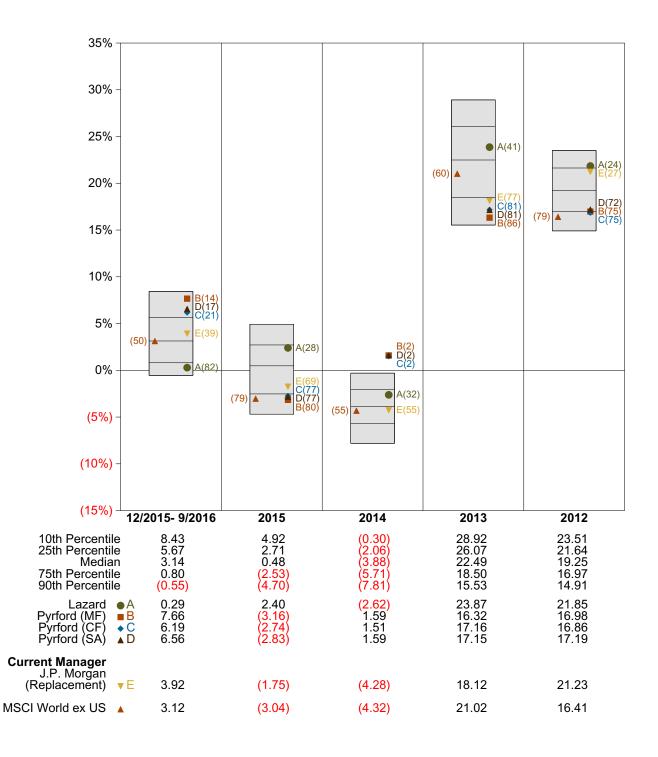
Note(s): Performance is shown gross-of-fees.



#### Sacramento Regional Transit District Performance vs CAI Non-U.S. Equity Style Recent Periods

#### **Return Ranking**

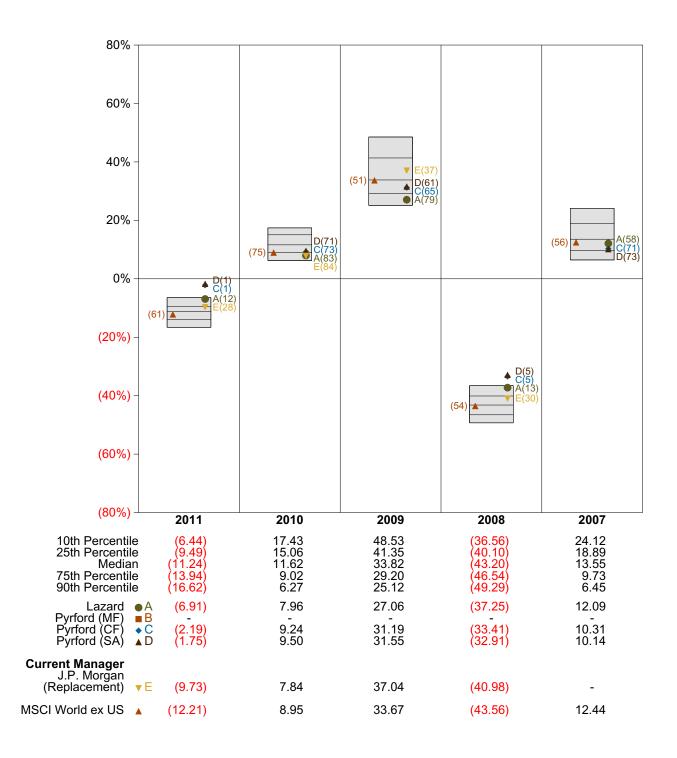
The chart below illustrates fund rankings over various periods versus the CAI Non-U.S. Equity Style. The bars represent the range of returns from the 10th percentile to the 90th percentile for each period for all funds in the CAI Non-U.S. Equity Style. The numbers to the right of the bar represent the percentile rankings of the funds being analyzed. The table below the chart details the rates of return plotted in the graph above.



#### Sacramento Regional Transit District Performance vs CAI Non-U.S. Equity Style Recent Periods

#### **Return Ranking**

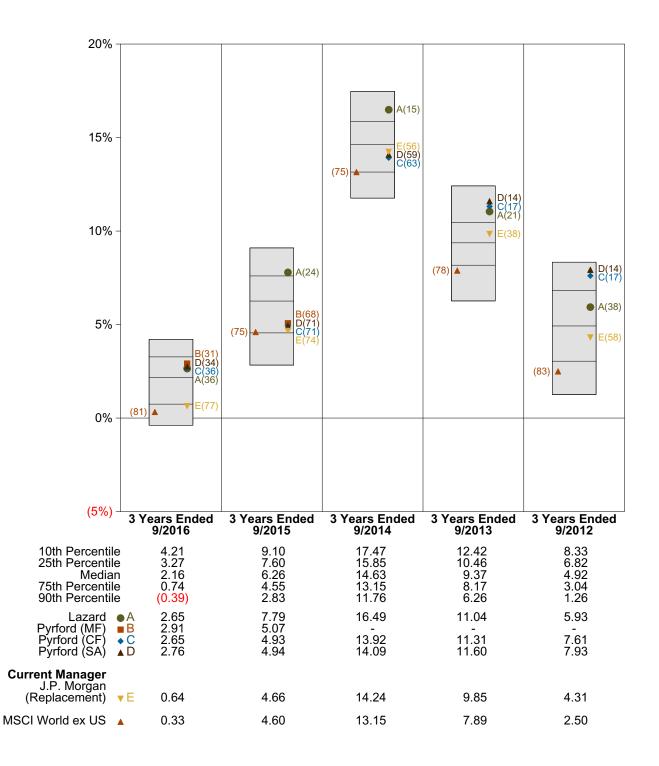
The chart below illustrates fund rankings over various periods versus the CAI Non-U.S. Equity Style. The bars represent the range of returns from the 10th percentile to the 90th percentile for each period for all funds in the CAI Non-U.S. Equity Style. The numbers to the right of the bar represent the percentile rankings of the funds being analyzed. The table below the chart details the rates of return plotted in the graph above.



#### Sacramento Regional Transit District Performance vs CAI Non-U.S. Equity Style Rolling Periods

#### **Return Ranking**

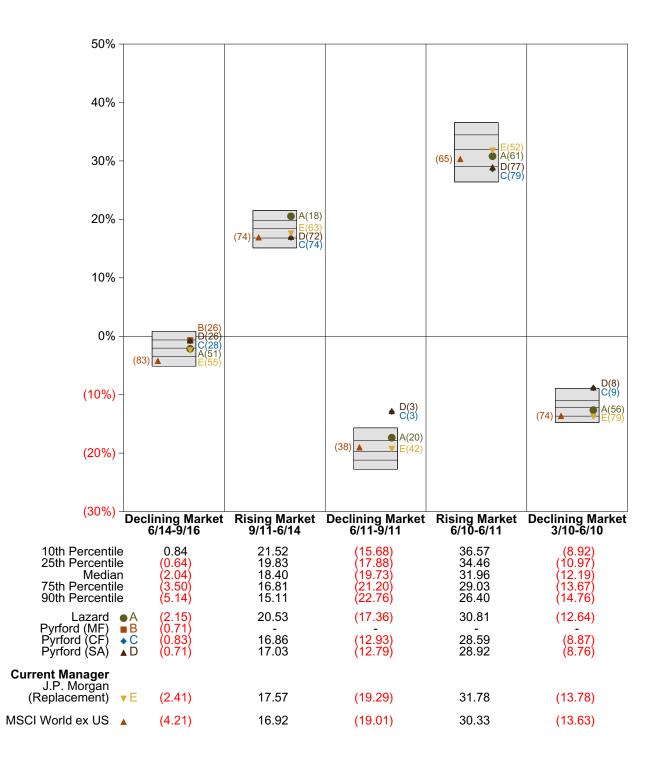
The chart below illustrates fund rankings over various periods versus the CAI Non-U.S. Equity Style. The bars represent the range of returns from the 10th percentile to the 90th percentile for each period for all funds in the CAI Non-U.S. Equity Style. The numbers to the right of the bar represent the percentile rankings of the funds being analyzed. The table below the chart details the rates of return plotted in the graph above.



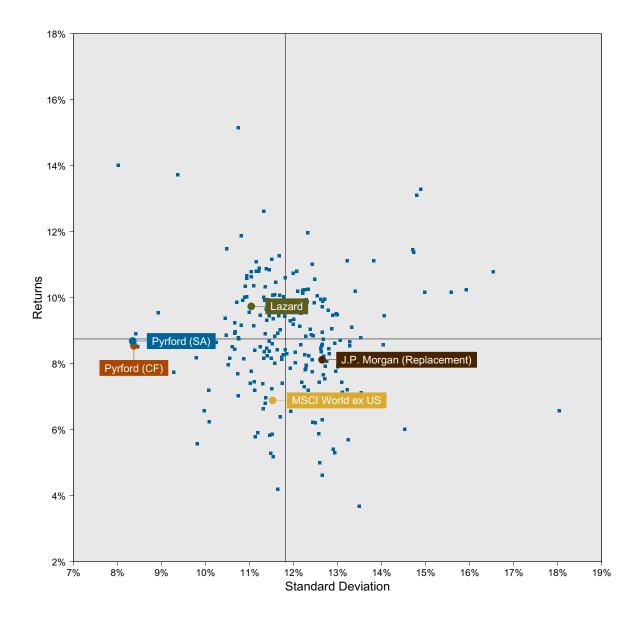
#### Sacramento Regional Transit District Performance vs CAI Non-U.S. Equity Style International Stock Market Cycles

#### **Return Ranking**

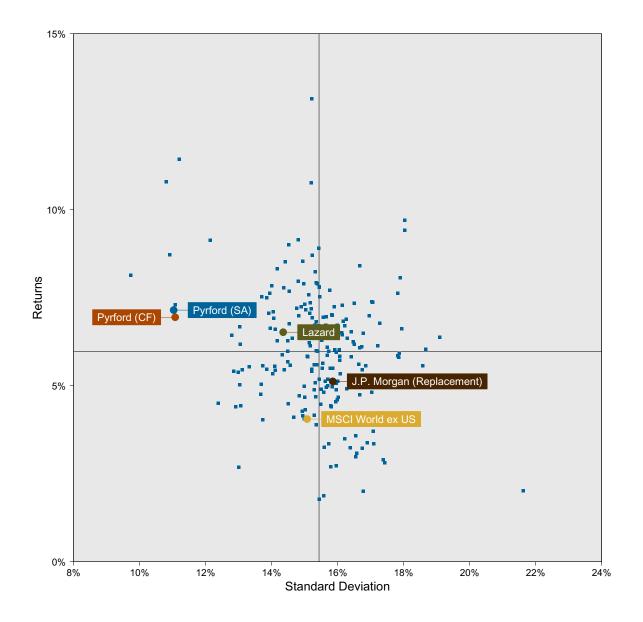
The chart below illustrates fund rankings over various periods versus the CAI Non-U.S. Equity Style. The bars represent the range of returns from the 10th percentile to the 90th percentile for each period for all funds in the CAI Non-U.S. Equity Style. The numbers to the right of the bar represent the percentile rankings of the funds being analyzed. The table below the chart details the rates of return plotted in the graph above.



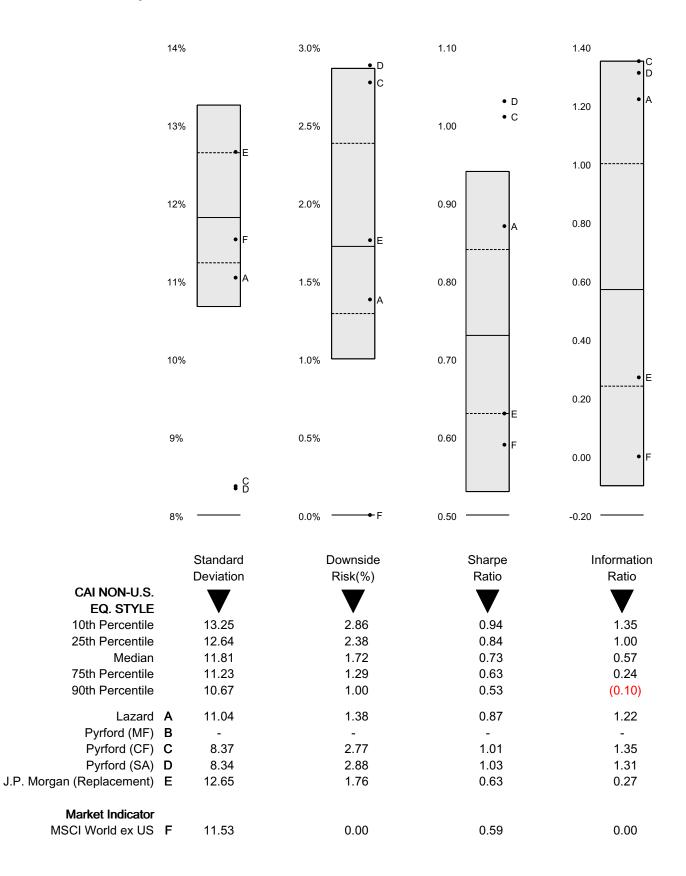
#### Sacramento Regional Transit District Risk/Reward vs CAI Non-U.S. Equity Style Five Years Ended September 30, 2016



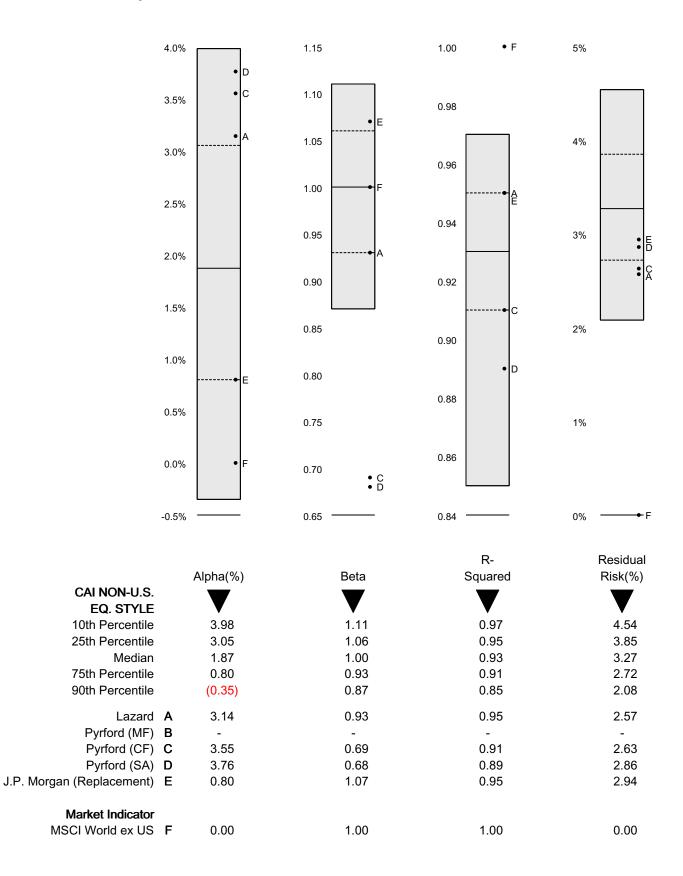
#### Sacramento Regional Transit District Risk/Reward vs CAI Non-U.S. Equity Style Seven Years Ended September 30, 2016



#### Sacramento Regional Transit District Risk Statistics Relative to MSCI World ex US Index (USD Net Div) vs CAI Non-U.S. Equity Style Five Years Ended September 30, 2016

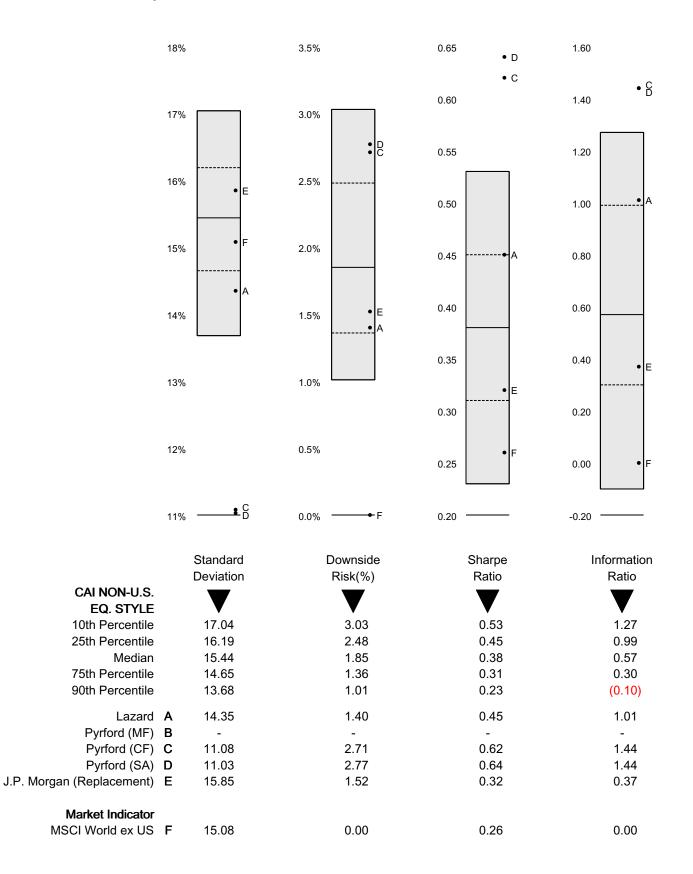


#### Sacramento Regional Transit District Risk Statistics Relative to MSCI World ex US Index (USD Net Div) vs CAI Non-U.S. Equity Style Five Years Ended September 30, 2016

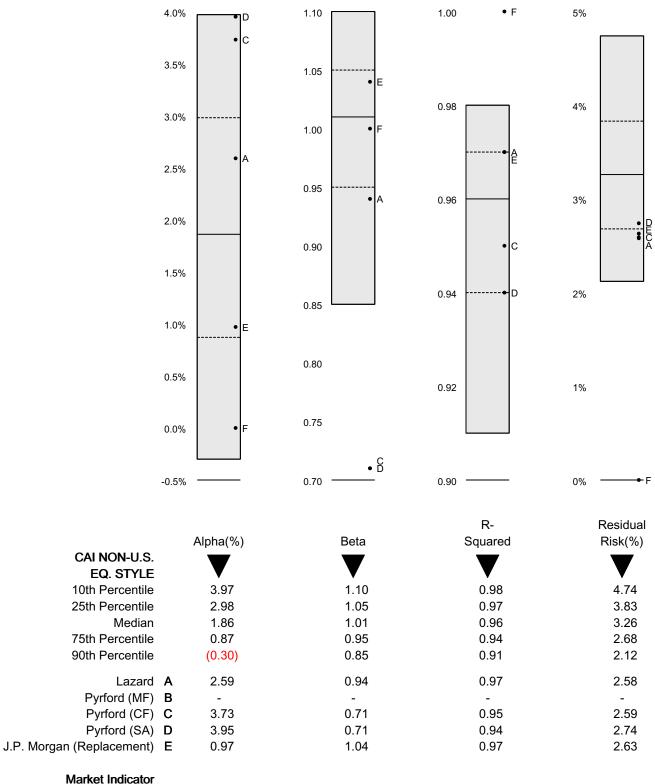


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#### Sacramento Regional Transit District Risk Statistics Relative to MSCI World ex US Index (USD Net Div) vs CAI Non-U.S. Equity Style Seven Years Ended September 30, 2016



#### Sacramento Regional Transit District Risk Statistics Relative to MSCI World ex US Index (USD Net Div) vs CAI Non-U.S. Equity Style Seven Years Ended September 30, 2016



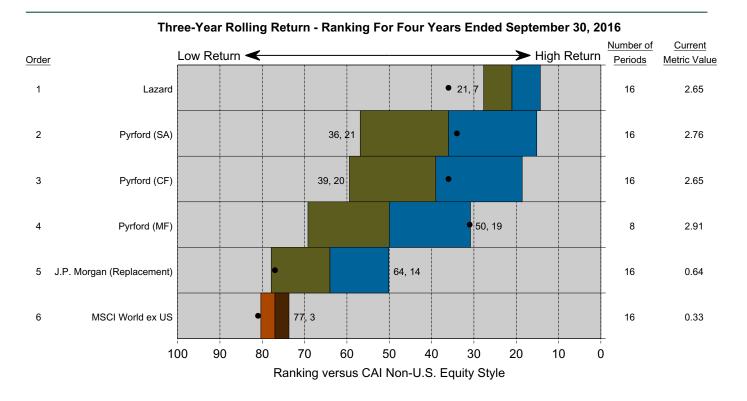
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- Callan

0.00

1.00

This page compares multiple portfolios to each other by analyzing both the historical average ranking for a given metric versus a relevant peer group, as well as the consistency and range (standard deviation) of that ranking over time. The midpoint of each sideways bar represents the average ranking of a given portfolio over time, and the width of the bar represents the consistency and range of that ranking (+/- 1 standard deviation). The comma-separated numbers show the average and standard deviation respectively, of the portfolios ranking. Each portfolio's current ranking is demarcated by a dot, while the corresponding current value of the metric is displayed on the far right.

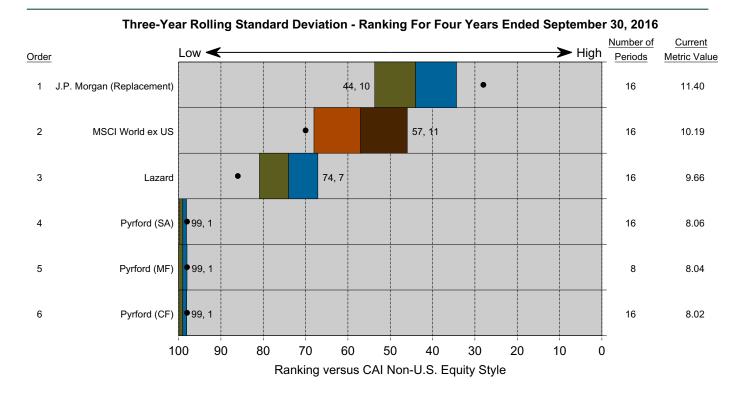


Number of Current Low Return <del>
<</del> → High Return Order Periods Metric Value 1 Lazard 38, 25 32 4.52 2 Pyrford (SA) 41, 30 . 32 11.61 3 Pyrford (CF) 43, 30 . 32 11.13 4 Pyrford (MF) 48, 30 16 11.62 53, 20 5 J.P. Morgan (Replacement) 32 9.01 6 MSCI World ex US 65, 12 7 16 32 100 90 80 70 60 50 40 30 20 10 0

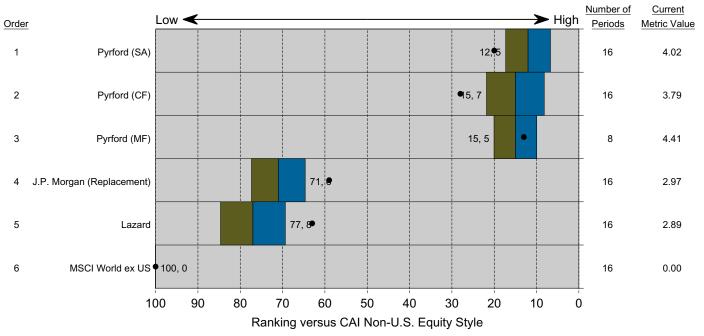
Ranking versus CAI Non-U.S. Equity Style

One-Year Rolling Return - Ranking For Eight Years Ended September 30, 2016

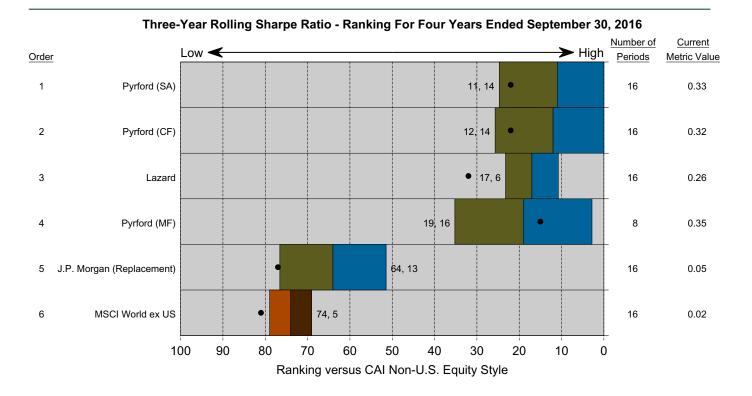
This page compares multiple portfolios to each other by analyzing both the historical average ranking for a given metric versus a relevant peer group, as well as the consistency and range (standard deviation) of that ranking over time. The midpoint of each sideways bar represents the average ranking of a given portfolio over time, and the width of the bar represents the consistency and range of that ranking (+/- 1 standard deviation). The comma-separated numbers show the average and standard deviation respectively, of the portfolios ranking. Each portfolio's current ranking is demarcated by a dot, while the corresponding current value of the metric is displayed on the far right.



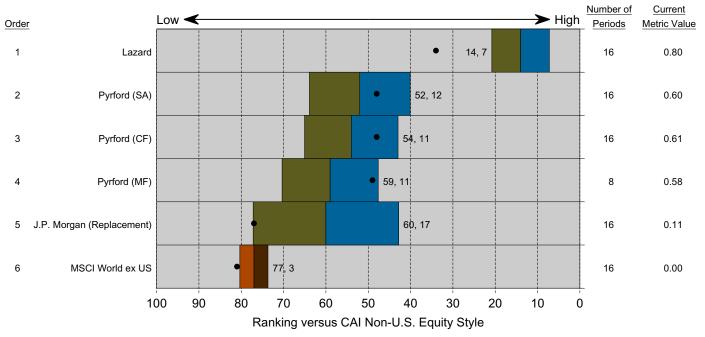
Three-Year Rolling Tracking Error Versus MSCI World Ex US Ranking For Four Years Ended September 30, 2016



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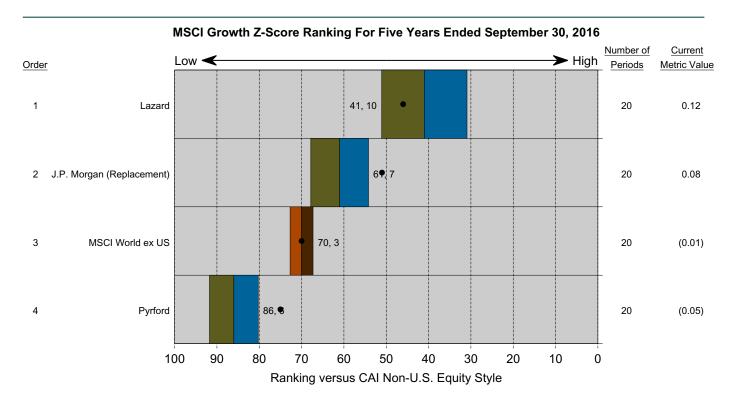


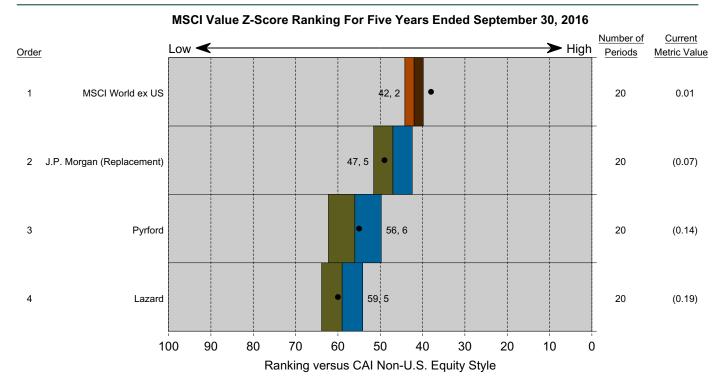
Three-Year Rolling Excess Return Ratio Versus MSCI World Ex US Ranking For Four Years Ended September 30, 2016



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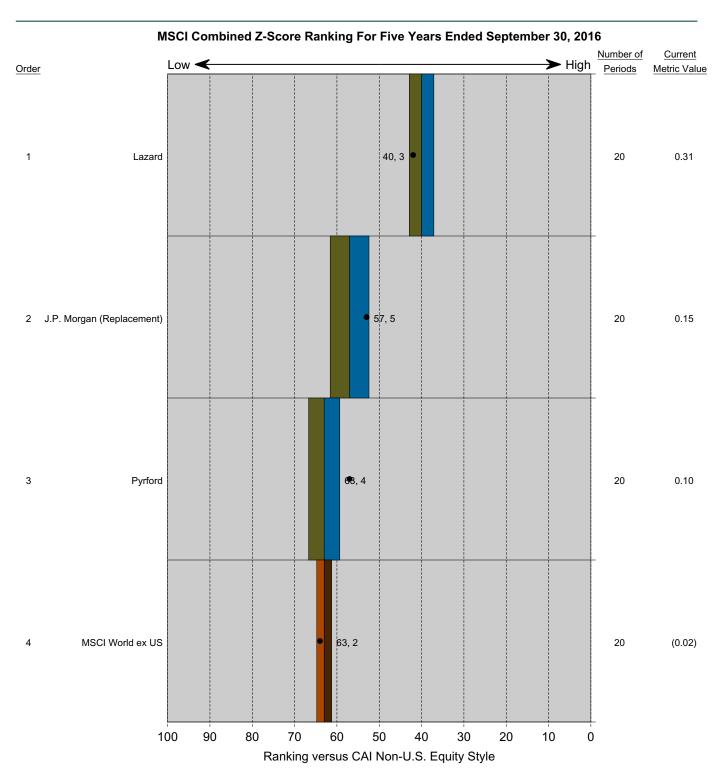
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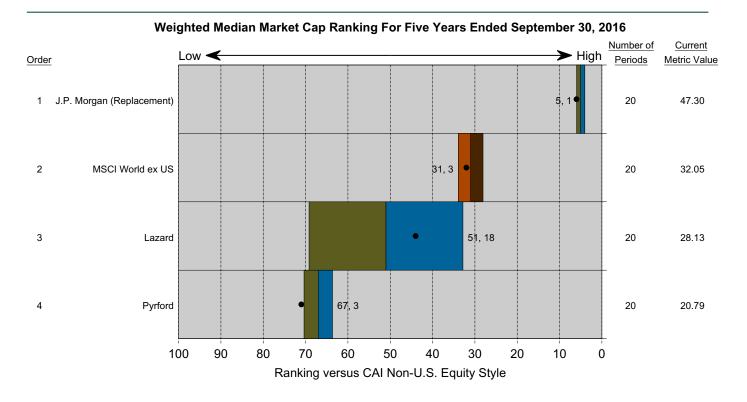


Sacramento Regional Transit District 15

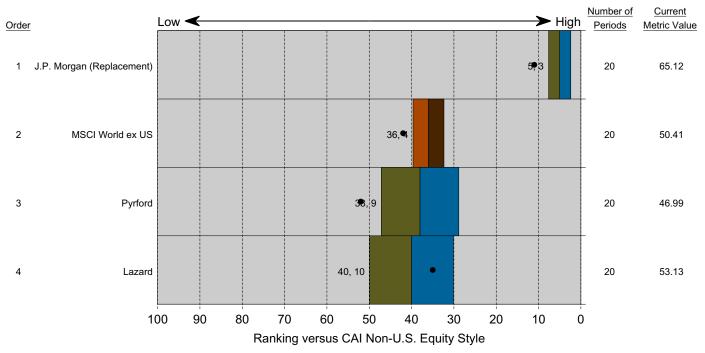
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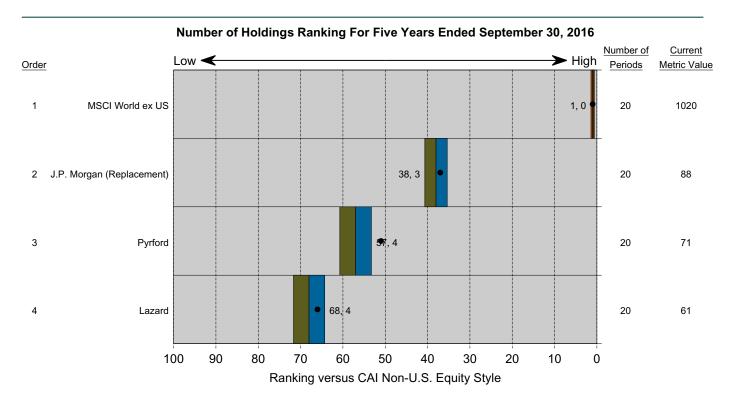
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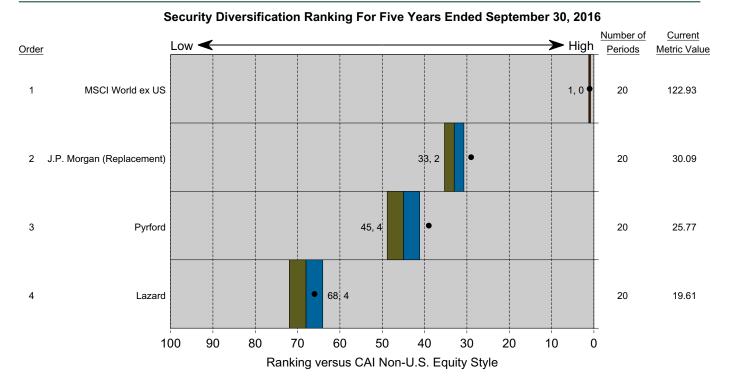


Weighted Average Market Cap Ranking For Five Years Ended September 30, 2016



This page compares multiple portfolios to each other by analyzing both the historical average ranking for a given metric versus a relevant peer group, as well as the consistency and range (standard deviation) of that ranking over time. The midpoint of each sideways bar represents the average ranking of a given portfolio over time, and the width of the bar represents the consistency and range of that ranking (+/- 1 standard deviation). The comma-separated numbers show the average and standard deviation respectively, of the portfolios ranking. Each portfolio's current ranking is demarcated by a dot, while the corresponding current value of the metric is displayed on the far right.





This page allows for detailed comparisons of multiple managers against each other, as well as versus market indices and peer groups. This comparative analysis can evaluate, for each portfolio pair, one portfolio's performance and risk patterns relative to the other portfolio's performance patterns. The excess return correlation matrices illustrate the extent to which various manager's excess returns versus the appropriate index are correlated to each other. Managers whose excess returns are less correlated with each other tend to diversify each other's active risk. This complementary type of manager mix can have a beneficial effect on the resulting active risk/return tradeoff.

## Excess Return Correlations for 5 Years Ended September 30, 2016 vs the MSCI World ex US

(20)	Lazard	0.00	(0.00)	0.12	0.13	-	1.00
(0)	Pyrford (MF)	-	-	-	-	-	-
(20)	Pyrford (CF)	0.00	(0.20)	1.00	1.00	-	0.13
(20)	Pyrford (SA)	0.00	(0.20)	1.00	1.00	-	0.12
(20)	J.P. Morgan (Replacement)	0.00	1.00	(0.20)	(0.20)	-	(0.00)
(20)	MSCI World ex US	0.00	0.00	0.00	0.00	-	0.00
·		MSCI World ex US	J.P. Morgan (Replacement)	Pyrford (SA)	Pyrford (CF)	Pyrford (MF)	Lazard

This page allows for detailed comparisons of multiple managers against each other, as well as versus market indices and peer groups. This comparative analysis can involve various types of performance statistics and holdings-based portfolio analysis over multiple time periods. The number in the middle of each box is the relevant value for a given portfolio, and the smaller number in the lower right corner is the relevant peer group ranking of that value.

			cs for 5 Years E nd the CAI Non					
20)	Lazard	11.04% ( <b>81</b> )	2.61 (79)	1.38% ( <b>70</b> )	0.95	0.87	1.02 (20)	0.98%
(0)	Pyrford (MF)	-	-	-	-	-	-	-
20)	Pyrford (CF)	8.37% (99)	4.39 (16)	2.77% (13)	0.91 ( <b>75</b> )	1.01 ( <b>4</b> )	0.35 (67)	0.95% (6
20)	Pyrford (SA)	8.34% (99)	4.60 (12)	2.88% (9)	0.89 (84)	1.03 ( <b>4</b> )	0.37 (66)	0.95% (8
:0)	J.P. Morgan (Replacement)	12.65% (24)	2.97 (64)	1.76% ( <b>49</b> )	0.95 (26)	0.63	0.39 (63)	0.97% (2
0)	MSCI World ex US	11.53% (61)	0.00	0.00%	1.00	0.59	0.00	1.00%
L		Standard Deviation	Tracking Error	Downside Risk	R-Squared	Sharpe Ratio	Excess Return Ratio	Correlation

This page allows for detailed comparisons of multiple managers against each other, as well as versus market indices and peer groups. This comparative analysis can involve various types of performance statistics and holdings-based portfolio analysis over multiple time periods. The number in the middle of each box is the relevant value for a given portfolio, and the smaller number in the lower right corner is the relevant peer group ranking of that value.

			cs for 7 Years E nd the CAI Non					
28)	Lazard	14.35% (81)	2.70	1.40% (73)	0.97	0.45	0.88 (26)	0.99%
(0)	Pyrford (MF)	-	-	-	-	-	-	-
28)	Pyrford (CF)	11.08% ( <b>98</b> )	4.99 (11)	2.71% (17)	0.95 (65)	0.62	0.56 (47)	0.97%
28)	Pyrford (SA)	11.03% (98)	5.14 ( <b>10</b> )	2.77% (15)	0.94	0.64	0.58 ( <b>45</b> )	0.97%
28)	J.P. Morgan (Replacement)	15.85% ( <b>35</b> )	2.64 (81)	1.52% (67)	0.97	0.32	0.39 (62)	0.99%
:8)	MSCI World ex US	15.08%	0.00	0.00%	1.00	0.26	0.00	1.00%
L		Standard Deviation	Tracking Error	Downside Risk	R-Squared	Sharpe Ratio	Excess Return Ratio	Correlation

This page allows for detailed comparisons of multiple managers against each other, as well as versus market indices and peer groups. This comparative analysis can involve various types of performance statistics and holdings-based portfolio analysis over multiple time periods. The number in the middle of each box is the relevant value for a given portfolio, and the smaller number in the lower right corner is the relevant peer group ranking of that value.

# Average Equity Characteristics for 5 Years Ended September 30, 2016 VS THE CAI Non-U.S. Eq. Style Peer Group

					-								
(20)	Lazard	2.03 ( <b>30</b> )	2.72% (55)	1.29% ( <b>48</b> )	0.27 ( <b>40</b> )	65 (68)	10.41 (52)	13.05 (53)	13.06 (53)	27.30 (51)	50.93 ( <b>40</b> )	20.92 (68)	32.10% ( <b>44</b> )
(20)	Pyrford	2.23 ( <b>20</b> )	3.76% (6)	1.94% (7)	(0.02) (63)	72 (57)	7.36 (91)	13.89 ( <b>34</b> )	14.05 ( <b>33</b> )	22.79 (67)	52.18 ( <b>38</b> )	25.49 ( <b>45</b> )	35.23% (23)
(20)	J.P. Morgan (Replacement)	1.63 ( <b>56</b> )	2.89% ( <b>43</b> )	1.32% ( <b>48</b> )	0.06 (57)	90 (38)	9.95 ( <b>59</b> )	12.63 (61)	12.63 (61)	50.91 (5)	69.98 (5)	28.92 (33)	32.03% (44)
(20)	MSCI World ex US	1.57 (61)	3.25% (23)	1.43% ( <b>30</b> )	(0.02) (63)	1009 (1)	9.41 ( <b>70</b> )	13.27 ( <b>47</b> )	13.30 (46)	33.85 ( <b>31</b> )	52.54 (36)	110.24 (1)	10.93% ( <b>95</b> )
		Price/ Book Value	Indicated Dividend Yield	P/E to Growth	MSCI Combined Z-Score	Number of Holdings		Forecasted	Forecasted	Woightod	Weighted Average Mkt Cap	Security Divers- ification	Divers- ification Ratio

This page allows for detailed comparisons of multiple managers against each other, as well as versus market indices and peer groups. This comparative analysis can involve various types of performance statistics and holdings-based portfolio analysis over multiple time periods. The number in the middle of each box is the relevant value for a given portfolio.

Average Sector Weights	for 5 Voors	Ended Se	ntember 30 2016
Average Sector weights	IOI 5 Tears	Ellueu Se	plember 30, 2010

	<b>J</b>		J					,							
(20)	Lazard	21.53%	13.48%	15.87%	11.98%	12.62%	5.15%	6.83%	5.62%	5.12%	1.41%	0.14%	0.10%	0.00%	0.00%
(20)	Pyrford	8.37%	17.61%	5.29%	9.43%	11.61%	8.44%	10.79%	12.09%	9.49%	6.39%	0.00%	0.04%	0.41%	0.00%
(20)	J.P. Morgan (Replacement)	22.40%	13.09%	14.32%	11.25%	11.33%	9.85%	7.29%	2.61%	7.06%	0.54%	0.16%	0.10%	0.00%	0.00%
(20)	MSCI World ex US	25.15%	12.56%	11.31%	10.73%	9.72%	8.88%	8.19%	5.21%	4.39%	3.59%	0.19%	0.07%	0.00%	0.00%
		Financ	Indequ	Concyc	Consta	Health	Rawmat	Energy	Commun	Tech	Pubutl	Reales	Misc	Fund	Trans

This page allows for detailed comparisons of multiple managers against each other, as well as versus market indices and peer groups. The holding overlap matrices illustrate the degree of individual stock overlap between various portfolios' holdings. The number in parentheses in the lower left corner of each box is the number of stocks that a given portfolio pair hold in common. The number in the upper left corner is the total weight of these overlapping holdings in the y-axis (vertical) portfolio. The number in the lower right corner is the total weight of those same stocks in the x-axis (horizontal) portfolio.

	Average Ho	lding O	verlap	for 5 Yea	rs Ended	Septeml	oer 30, 20	)16					
0)	Lazard	(48)	78%	13%	(19)	40%	27%	(7)	17%	13%			
)	Pyrford	(57)	79%	17%	(14)	26%	21%				(7)	13%	17%
))	J.P. Morgan (Replacement)	(78)	89%	27%				(14)	21%	26%	(19)	27%	40%
))	MSCI World ex US				(78)	27%	89%	(57)	17%	79%	(48)	13%	78%
	MSCI World ex US			J.P. Morgan (Replacement)			Pyrford			Lazard			



Appendix



# Definitions and Disclosures

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#### **Definitions**

**Alpha** measures a portfolio's return in excess of the market return adjusted for risk. It is a measure of the manager's contribution to performance with reference to security selection. A positive alpha indicates that a portfolio was positively rewarded for the residual risk which was taken for that level of market exposure.

**Beta** measures the sensitivity of rates of portfolio returns to movements in the market index. A portfolio's beta measures the expected change in return per 1% change in the return on the market. If a beta of a portfolio is 1.5, a 1 percent increase in the return on the market will result, on average, in a 1.5 percent increase in the return on the return.

**Diversification Ratio** – The ratio of the number of securities comprising the most concentrated half of the portfolio market value divided by the total number of portfolio securities. This value expresses to what extent a portfolio is equally weighted versus concentrated, given the number of names in the portfolio. This value can range from a high of 50% (equal weighted) to a low of 1% (half of the portfolio in 1% of the names).

**Downside Risk** stems from the desire to differentiate between "good risk" (upside volatility) and "bad risk" (downside volatility). Whereas standard deviation punishes both upside and downside volatility, downside risk measures only the standard deviation of returns below the target. Returns above the target are assigned a deviation of zero. Both the frequency and magnitude of underperformance affect the amount of downside risk.

**Excess Return Ratio** is a measure of risk adjusted relative return. This ratio captures the amount of active management performance (value added relative to an index) per unit of active management risk (tracking error against the index.) It is calculated by dividing the manager's annualized cumulative excess return relative to the index by the standard deviation of the individual quarterly excess returns. The Excess Return Ratio can be interpreted as the manager's active risk/reward tradeoff for diverging from the index when the index is mandated to be the "riskless" market position.

**Information Ratio** measures the manager's market risk-adjusted excess return per unit of residual risk relative to a benchmark. It is computed by dividing alpha by the residual risk over a given time period. Assuming all other factors being equal, managers with lower residual risk achieve higher values in the information ratio. Managers with higher information ratios will add value relative to the benchmark more reliably and consistently.

**Market Capitalization (weighted median)** – The weighted median market cap is the point at which half of the market value of the portfolio is invested in stocks with a greater market cap, and consequently the other half is invested in stocks with a lower market cap.

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#### **Definitions** (continued)

**MSCI Combined Z Score** is the difference between the MSCI Growth Z Score and the MSCI Value Z Score (Growth - Value). A significant positive Combined Z Score implies significant "growthyness" in the stock or portfolio. A Combined Z Score close to 0.00 (positive or negative) implies "core-like" style characteristics, and a significantly negative Combined Z Score implies more "valueyness" in the stock or portfolio.

**MSCI Growth Z Score** is a holdings-based measure of the "growthyness" of an individual stock or portfolio of stocks based on fundamental financial ratio analysis. The MSCI Growth Z Score is an aggregate score based on the growth score of five separate financial fundamentals: Long Term Forward Earnings Growth, Short Term Forward Earnings Growth, Current Internal Growth (ROE \* (1-payout ratio)), Long Term Historical Earnings Growth, and Long Term Historical Sales Growth.

**MSCI Value Z Score** is a holdings-based measure of the "valueyness" of an individual stock or portfolio of stocks based on fundamental financial ratio analysis. The MSCI Value Z Score is an aggregate score based on the value scores of three separate financial fundamentals: Price/Book, Price/Forward Earnings, and Dividend Yield.

**Number of Issues** in Top Half of MV measures the number of stocks (largest holdings) making up half of the market value of the portfolio.

**R-Squared** indicates the extent to which the variability of the portfolio returns is explained by market action. It can also be thought of as measuring the diversification relative to the appropriate benchmark. An r-squared value of .75 indicates that 75% of the fluctuation in a portfolio return is explained by market action. An r-squared of 1.0 indicates that a portfolio's returns are entirely related to the market and it is not influenced by other factors. An r-squared of zero indicates that no relationship exists between the portfolio's return and the market.

**Relative Sector Variance** – A measure illustrating how significantly a portfolio currently differs from the sector weights of the index. This measure is the sum of the differences (absolute value) between the portfolio and index sector weights across all sectors. The higher the number the more aggressive the deviation from the index sector weights, and vice versa. This relative risk measure can help explain the magnitude of past tracking error and potential future tracking error versus the index.

**Relative Standard Deviation** is a simple measure of a manager's risk (volatility) relative to a benchmark. It is calculated by dividing the manager's standard deviation of returns by the benchmark's standard deviation of returns. A relative standard deviation of 1.20, for example, means the manager has exhibited 20% more risk than the benchmark over that time period. A ratio of .80 would imply 20% less risk. This ratio is especially useful when analyzing the risk of investment grade fixed-income products where actual historical durations are not available. By using this relative risk measure over rolling time periods one can illustrate the "implied" historical duration patterns of the portfolio versus the benchmark.

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#### **Definitions** (continued)

**Sector Concentration** – A measure of current portfolio diversification by economic sector (equity) or market sector (fixed income) to illustrate potential risk from concentrated sector exposures. The measure itself represents how few sectors contain half of the portfolio market value. A low number means the assets are concentrated in a few sectors and potentially highly exposed to the risks of those sectors.

**Sharpe Ratio** is a commonly used measure of risk-adjusted return. It is calculated by subtracting the "risk-free" return (usually 3 Month Treasury Bill) from the portfolio return and dividing the resulting "excess return" by the portfolio's risk level (standard deviation). The result is a measure of return gained per unit of risk taken.

**Standard Deviation** is a statistical measure of portfolio risk. It reflects the average deviation of the observations from their sample mean. Standard deviation is used as an estimate of risk since it measures how wide the range of returns typically is. The wider the typical range of returns, the higher the standard deviation of returns, and the higher the portfolio risk. If returns are normally distributed (i.e., has a bell shaped curve distribution) then approximately 2/3 of the returns would occur within plus or minus one standard deviation from the sample mean.

**Total Portfolio Risk** is a measure of the volatility of the quarterly excess returns of an asset. Total risk is composed of two measures of risk: market (non-diversifiable or systematic) risk and residual (diversifiable or unsystematic) risk. The purpose of portfolio diversification is to reduce the residual risk of the portfolio.

**Tracking Error** is a statistical measure of a portfolio's risk relative to an index. It reflects the standard deviation of a portfolio's individual quarterly or monthly returns from the index's returns. Typically, the lower the Tracking Error, the more "index-like" the portfolio.

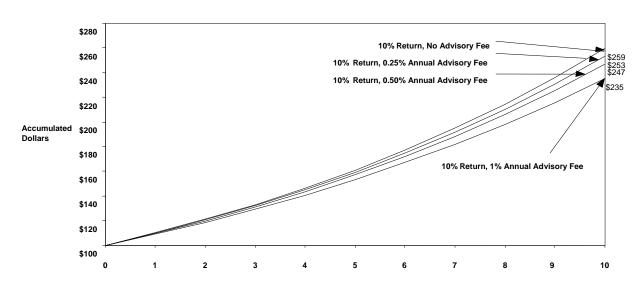
**Treynor Ratio** represents the portfolio's average excess return over a specified period divided by the beta relative to its benchmark over that same period. This measure reflects the reward over the risk-free rate relative to the systematic risk assumed.

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#### **Disclosure Statement**

The preceding report has been prepared for the exclusive use of the Sacramento Regional Transit District. Unless otherwise noted, performance returns contained in this report do not reflect the deduction of investment advisory fees. The returns in this report will be reduced by the advisory fees and any other expenses incurred in the management of an investment account. The investment advisory fees applicable to the advisors listed in this report are described in Part II of each advisor's form ADV.

The following graphical and tabular example illustrates the cumulative effect of investment advisory fees on a \$100 investment growing at 10% over ten years. Fees are assumed to be paid monthly.



#### The Cumulative Effect of Advisory Fees

Accumulated	Dollars a	at End of Years
-------------	-----------	-----------------

	1	2	3	4	5	6	7	8	9	10
No Fee	110.0	121.0	133.1	146.4	161.1	177.2	194.9	214.4	235.8	259.4
25 Basis Points	109.7	120.4	132.1	145.0	159.1	174.5	191.5	210.1	230.6	253.0
50 Basis Points	109.5	119.8	131.1	143.5	157.1	172.0	188.2	206.0	225.5	246.8
100 Basis Points	108.9	118.6	129.2	140.7	153.3	166.9	181.8	198.0	215.6	234.9

10% Annual Return Compounded Monthly, Annual Fees Paid Monthly.

#### List of Callan's Investment Manager Clients

Confidential - For Callan Client Use Only

Callan takes its fiduciary and disclosure responsibilities to clients very seriously. We recognize that there are numerous potential conflicts of interest encountered in the investment consulting industry and that it is our responsibility to manage those conflicts effectively and in the best interest of our clients. At Callan, we employ a robust process to identify, manage, monitor and disclose potential conflicts on an on-going basis.

The list below is an important component of our conflicts management and disclosure process. It identifies those investment managers that pay Callan fees for educational, consulting, software, database or reporting products and services. We update the list quarterly because we believe that our fund sponsor clients should know the investment managers that do business with Callan, particularly those investment manager clients that the fund sponsor clients may be using or considering using. Please refer to Callan's ADV Part 2A for a more detailed description of the services and products that Callan makes available to investment manager clients through our Institutional Consulting Group, Independent Adviser Group and Fund Sponsor Consulting Group. Due to the complex corporate and organizational ownership structures of many investment management firms, parent and affiliate firm relationships are not indicated on our list.

Fund sponsor clients may request a copy of the most currently available list at any time. Fund sponsor clients may also request specific information regarding the fees paid to Callan by particular fund manager clients. Per company policy, information requests regarding fees are handled exclusively by Callan's Compliance Department.

Manager Name	Manager Name
1607 Capital Partners, LLC	Capital Group
Aberdeen Asset Management PLC	CastleArk Management, LLC
Acadian Asset Management LLC	Causeway Capital Management
AEGON USA Investment Management	Chartwell Investment Partners
Affiliated Managers Group, Inc.	ClearBridge Investments, LLC
AllianceBernstein	Cohen & Steers Capital Management, Inc.
Allianz Global Investors	Columbia Management Investment Advisers, LLC
Allianz Life Insurance Company of North America	Columbus Circle Investors
American Century Investment Management	Corbin Capital Partners, L.P.
Amundi Smith Breeden LLC	Cornerstone Capital Management
Analytic Investors	Cramer Rosenthal McGlynn, LLC
Angelo, Gordon & Co.	Crawford Investment Counsel, Inc.
Apollo Global Management	Credit Suisse Asset Management
AQR Capital Management	Crestline Investors, Inc.
Ares Management LLC	DE Shaw Investment Management, LLC
Ariel Investments, LLC	Delaware Investments
Aristotle Capital Management, LLC	DePrince, Race & Zollo, Inc.
Artisan Holdings	Deutsche Asset Management
Atlanta Capital Management Co., LLC	Diamond Hill Investments
Aviva Investors Americas	Duff & Phelps Investment Mgmt. Co.
AXA Investment Managers	Eagle Asset Management, Inc.
Babson Capital Management	EARNEST Partners, LLC
Baillie Gifford Overseas Limited	Eaton Vance Management
Baird Advisors	Epoch Investment Partners, Inc.
Bank of America	Fayez Sarofim & Company
Baring Asset Management	Federated Investors
Baron Capital Management, Inc.	Fidelity Institutional Asset Management
Barrow, Hanley, Mewhinney & Strauss, LLC	Fiera Capital Global Asset Management
BlackRock	First Eagle Investment Management, LLC
BMO Asset Management, Corp.	First Hawaiian Bank Wealth Management Division
BNP Paribas Investment Partners	Fisher Investments
BNY Mellon Asset Management	Fort Washington Investment Advisors, Inc.
Boston Partners	Franklin Templeton Institutional
Brandes Investment Partners, L.P.	Fred Alger Management, Inc.
Brandywine Global Investment Management, LLC	Fuller & Thaler Asset Management, Inc.
Brown Brothers Harriman & Company	GAM (USA) Inc.
Cambiar Investors, LLC	GE Asset Management

Manager Name
GMO
Goldman Sachs Asset Management
Grand-Jean Capital Management
Guggenheim Investments
GW&K Investment Management
Harbor Capital Group Trust
Hartford Funds
Hartford Investment Management Co.
Henderson Global Investors
Hotchkis & Wiley Capital Management, LLC
HSBC Global Asset Management
Income Research + Management, Inc.
Insight Investment Management Limited
Institutional Capital LLC
INTECH Investment Management, LLC
Invesco
Investec Asset Management
Janus Capital Management, LLC
Jensen Investment Management
J.P. Morgan Asset Management
KeyCorp
Lazard Asset Management
Legal & General Investment Management America
Lincoln National Corporation
LMCG Investments, LLC
Longview Partners
Loomis, Sayles & Company, L.P.
Lord Abbett & Company
Los Angeles Capital Management
LSV Asset Management
MacKay Shields LLC
Man Investments Inc.
Manulife Asset Management
Martin Currie Inc.
MFS Investment Management
MidFirst Bank
Mondrian Investment Partners Limited
Montag & Caldwell, LLC
Morgan Stanley Investment Management
Mountain Lake Investment Management LLC
MUFG Union Bank, N.A.
Neuberger Berman
Newton Investment Management (fka Newton Capital Management)
Nikko Asset Management Co., Ltd.
Northern Trust Asset Management
Nuveen Investments, Inc.
OFI Global Asset Management
Old Mutual Asset Management
Opus Capital Management Inc.
Pacific Investment Management Company

Manager Name
Parametric Portfolio Associates
Peregrine Capital Management, Inc.
PGIM
PineBridge Investments
Pinnacle Asset Management L.P.
Pioneer Investments
PNC Capital Advisors, LLC
Principal Global Investors
Private Advisors, LLC
Putnam Investments, LLC
QMA (Quantitative Management Associates)
RBC Global Asset Management
Regions Financial Corporation
RidgeWorth Capital Management, Inc.
Rockefeller & Co., Inc.
Rothschild Asset Management, Inc.
Russell Investments
Santander Global Facilities
Schroder Investment Management North America Inc.
Scout Investments
SEI Investments
Smith, Graham & Co. Investment Advisors, L.P.
Smith Group Asset Management
Standard Life Investments Limited
Standish
State Street Global Advisors
Stone Harbor Investment Partners, L.P.
Systematic Financial Management
T. Rowe Price Associates, Inc.
Taplin, Canida & Habacht
The Boston Company Asset Management, LLC
The Hartford
The London Company
The TCW Group, Inc.
Tri-Star Trust Bank
UBS Asset Management
Van Eck Global Versus Capital Group
Victory Capital Management Inc.
Vontobel Asset Management, Inc. Voya Financial
Voya Financial Voya Investment Management (fka ING)
Waddell & Reed Asset Management Group
WCM Investment Management
WEDGE Capital Management
Wellington Management Company, LLP
Wells Capital Management
Western Asset Management Company
William Blair & Company

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#### Disclosure

The table below indicates whether one or more of the candidates listed in this report is itself a client of Callan as of the date of the most recent quarter end. These clients pay Callan for educational, software, database and/or reporting products and services; refer to our Form ADV 2A for additional information. Given the complex corporate and organizational ownership structures of many investment management, trust/custody and securities lending firms, the parent and affiliate firm relationships are not listed here if they don't separately contract with Callan.

The client list below may include parent companies who allow their affiliates to use some of the services for which they contract with Callan (eg, educational services including published research and attendance at conferences and workshops). Because Callan's investment manager client list changes periodically, the information below may not reflect changes since the most recent quarter end. Fund sponsor clients are welcome to request a complete list of Callan's investment manager clients at any time.

As a matter of policy, Callan follows strict procedures so that investment manager client relationships do not affect the process or outcome of any investment manager search or evaluation conducted by Callan.

Firm	Is an Investment Manager Client of Callan <sup>A</sup>	Is Not an Investment Manager Client of Callan <sup>A</sup>
Lazard Asset Management	Х	
Pyrford International PLC		Х

<sup>A</sup> Based upon Callan manager clients as of the most recent quarter end.



# Sacramento Regional Transit District Lazard International Equity

February 1, 2017

**Michael Powers** Managing Director, Portfolio Manager/Analyst

George Sands Director, Institutional Sales & Client Service



This presentation and all research and materials enclosed are property of Lazard Asset Management LLC.

Information and opinions presented have been obtained or derived from sources believed by Lazard to be reliable. Lazard makes no representation as to their accuracy or completeness. All opinions expressed herein are as of the date of this presentation and are subject to change.

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- I. Firm Overview
- II. Investment Process, Philosophy and Objectives
- III. Strategy Review
- IV. Performance Review
- V. Summary

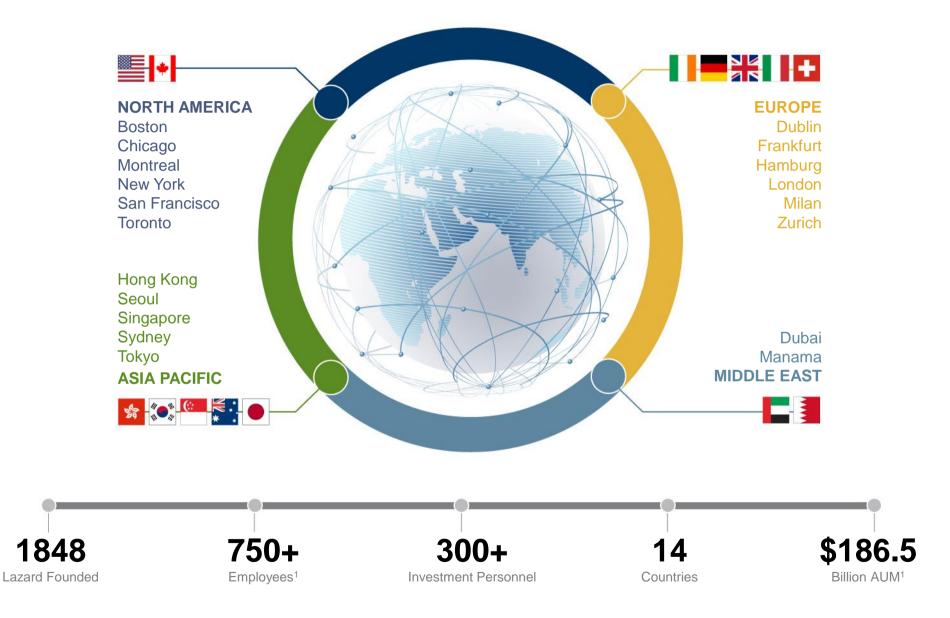
## VI. Appendix

- Biographies
- Performance Disclosures

1 Lazard Asset Management



# Lazard Asset Management



1 As of 30 September 2016. Includes those of Lazard Asset Management LLC (New York) and its affiliates, but do not include those of Lazard Frères Gestion (Paris) or other asset management businesses of Lazard Ltd.

3 Lazard Asset Management

# Lazard's Investment Organization

Ashish Bhutani Chief Executive Officer

James Donald

**Emerging Market Equity Strategies** 

John Reinsberg International/Global Equities Fixed Income

Ron Temple Multi Asset/US Equity Strategies

#### **Oversight Committee**

Management body for the investment platform that provides:

- Oversight for investment processes and products
- Reporting line for investment professionals

#### **Investment Council**

Senior investment professionals focused on:

- Providing investment leadership and sharing insight
- Monitoring communication among investment platforms and regions

# Assets Under Management

**By Client Type By Investment Mandate** Balanced/ Alternatives GTAA 1.6% 2.0% Multi Asset\_ 2.3% **Global Equity** Other<sup>2</sup> 15.2% 21.9% Fixed Income Corporate 14.6% 38.4% Individual. 5.0% International **US** Equity Equity Endowments\_ 11.0% 23.9% & Foundations Asia-Pacific Public/ 3.8% Equity Markets Equity Government Labor/Taft-\_ 4.3% 22.6% Hartley 22.3% European 3.6% Equity Insurance 2.5% 5.0%

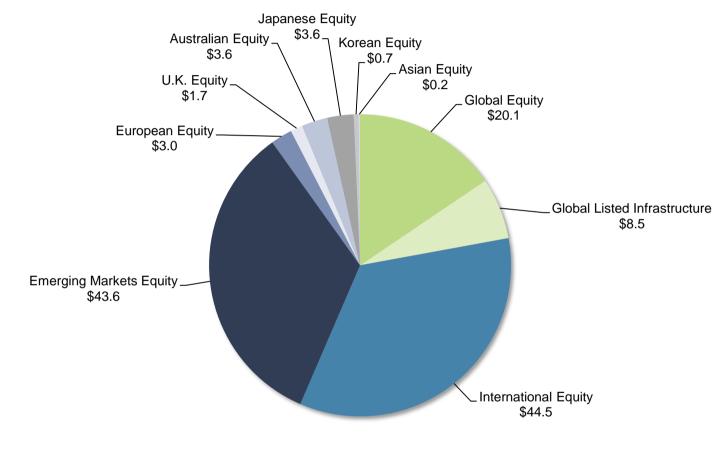
## Total Firm Assets Under Management<sup>1</sup>: 186.5 billion

1 As of 30 September 2016. Assets under management include those of Lazard Asset Management LLC (New York) and its affiliates, but do not include those of Lazard Frères Gestion (Paris) or other asset management businesses of Lazard Ltd.

2 Other represents clients invested in hedge funds, mutual funds, and other investment vehicles for which client type is not reported.

## Assets Under Management Global/International Equity

## Lazard Global/International Equity Assets (in US\$ billions)



Total Global/International Equity Assets: \$129.5 billion; 69.4% of Total Firm Assets

6 Lazard Asset Management

# Lazard US Public Funds Client List

Client Name	City	State
Alaska Permanent Fund Corporation	Juneau	AK
Alaska Retirement Management Board	Juneau	AK
Anchorage Police & Fire Retirement System	Anchorage	AK
Alabama Trust Fund	Montgomery	AL
Arkansas Local Police and Fire Retirement System	Little Rock	AR
City of Birmingham Firefighter's and Police Officer's Supplemental Pension System	Birmingham	AL
City of Birmingham Retirement and Relief System	Birmingham	AL
Arkansas Public Employees Retirement System	Little Rock	AR
Arkansas Teacher Retirement System	Little Rock	AR
California Public Employees' Retirement System	Sacramento	CA
California State Teachers' Retirement System	Sacramento	CA
City of Delano Employees' Retirement System	Delano	CA
Los Angeles City Employees Retirement System	Los Angeles	CA
Los Angeles County Employees Retirement Association	Los Angeles	CA
Los Angeles Firemen's Relief Association	Los Angeles	CA
Sacramento County Employees' Retirement System	Sacramento	CA
City of Bridgeport Pension Plan	Bridgeport	СТ
City of Milford Retirement System	Milford	CT
City of Stamford Firemen's Pension Fund	Stamford	СТ
City of Boca Raton Police & Firefighters' Retirement System	Boca Raton	FL
City of Daytona Beach Police & Firefighters' Pension Fund	Daytona Beach	FL
City of Fort Lauderdale Police & Firefighters' Retirement System	Fort Lauderdale	FL
City of Naples General, Police and Fire Retirement System	Naples	FL
City of Sunrise General Employees Retirement Fund	Sunrise	FL
Delray Beach Police and Fire Pension	Delray Beach	FL
Melbourne Firefighters Retirement System	Melbourne	FL
Pompano Beach Police & Firefighters Retirement System	Pompano Beach	FL
City of Columbus Pension Plan	Columbus	GA
Chicago Transit Authority Retiree Healthcare Trust	Chicago	IL
Forest Preserve District Annuity and Benefit Fund of Cook County	Chicago	IL
Public School Teachers' Pension and Retirement Fund of Chicago	Chicago	IL
The County Employees and Officers Annuity Benefit Fund of Cook County	Chicago	IL
Illinois Municipal Retirement Fund	Oak Brook	IL
Kansas City Board of Public Utilities (BPU)	Kansas City	KS
Kansas Public Employees Retirement System	Topeka	KS
Bristol County Employees Retirement System	Taunton	MA
Brockton Contributory Retirement System	Brockton	MA
Cambridge Retirement System	Cambridge	MA
City of Worcester Retirement System	Worcester	MA

7 | Lazard Asset Management

It is not known whether the clients listed approve or disapprove of Lazard or the advisory services provided. The above list generally includes all institutional clients who have not objected to inclusion in a representative list. Performance-based data were not used to determine which clients to include on the list.

# Lazard US Public Funds Client List

Client NameCityStateHolycke Curry Retirement SystemAdvectMANorth Ketternent SystemNorth Atteborough Contributory Retirement SystemSomervilleMASomerville Contributory Retirement SystemSomervilleMASomerville Contributory Retirement SystemBostonMAWestfield Contributory Retirement SystemWestfieldMASomerville Contributory Retirement SystemWestfieldMASomerville Contributory Retirement SystemBirminghamMICity of Farmingho Hills Enployees Retirement SystemFarminghamMICity of Varren General Employees Retirement SystemWarrenMICity of Varren General Employees Retirement SystemMonceMIOakland County Employees Retirement SystemMonceMIOakland County Employees Retirement SystemPontiacMIOakland County Employees Retirement SystemBirminghamMIOakland County Employees Retirement SystemCountbusMIOamha Chilic Retirement SystemCountbusMI <th></th> <th>0:0.</th> <th>01-1</th>		0:0.	01-1
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Wyoming State Treasurer's Office WY		Olympia	
	Wyoming State Treasurer's Office	Cheyenne	WY

It is not known whether the clients listed approve or disapprove of Lazard or the advisory services provided. The above list generally includes all institutional clients who have not objected to inclusion in a representative list. Performance-based data were not used to determine which clients to include on the list. 8 Lazard Asset Management

# Portfolio Management Lazard International Equity

## **Portfolio Management Team**

		Joined Lazard	Years in Industry
	<b>Michael G. Fry</b> Managing Director, Portfolio Manager/Analyst	2005	35
<b>B</b>	<b>Michael Bennett</b> Managing Director, Portfolio Manager/Analyst	1992	30
	<b>Giles Edwards, CFA, CIMA</b> Vice President, Portfolio Manager/Analyst	2008	13
	<b>Kevin J. Matthews, CFA</b> Managing Director, Portfolio Manager/Analyst	2001	15
	<b>Michael Powers</b> Managing Director, Portfolio Manager/Analyst	1990	26
	<b>John Reinsberg</b> Deputy Chairman, International and Global Strategies	1992	35

## **Focused Resources**

International	Years in Industry	Years at Lazard
Eduardo Abreu	11	Lazaiu 8
Nigel Barrett	27	9
Jimmie Bork	5	0
Jelena Boskovic	9	6
Elias Chrysostomou	14	6
Nathan Cockrell	21	9
Marina Erskine-Leacock	15	12
Robert Failla	23	13
Alistair Godrich	8	8
Jenny Hardy	5	1
Peter Hunsberger	27	25
Robin Jones	14	13
Mark Little	24	19
Neil Millar	10	10
Jonathan Morris	27	8
Dennis Neveling	10	10
Daniel Rozier	5	5
Guillaume Samama	6	6
Victoire Spahn	9	6
Jeremy Taylor	20	13
Barnaby Wilson	18	17

Emerging Markets	Years in Industry	
Thomas Boyle	19	6
Rohit Chopra	20	17
Elizabeth Chung	22	6
Myla Cruz	8	8
James Donald	33	20
Lada Emelianova	18	6
Donald Floyd	21	5
Peter Gillespie	24	9
Robert Horton	23	5
Arif Joshi	18	6
Mark Lien	26	8
John Mariano	18	6
Andrei Morosanu	17	17
Kevin O'Hare	25	15
Stephen Russell	19	5
Monika Shrestha	19	13
Sookyum (Celine) Woo	12	6
Ben Wulfsohn	25	15





Team membership is current as of the date of this document. Personnel data are calculated as of year-end 2016; YTD 2017 experience/tenure is not reflected

# Lazard Equity Investment Resources Regional Expertise

Eduardo Abreu David Alcaly Lee Ann Alexandrakis Nigel Barrett Michael Bennett Michael Bernadiner<sup>1</sup> Frank Bianco<sup>1</sup> David Bliss Jimmie Bork Nicholas Bratt Terence Brennan<sup>1</sup> Irene Cheng Adrian Cheung Bertrand Cliquet James Daly<sup>1</sup>

Kun Deng Yury Dubrovsky<sup>1</sup> Robert Failla Sara Fischer Martin Flood Louis Florentin-Lee Steven Fockens Michael Fry Gautam Garg Sarah George<sup>1</sup> Eduardo Gonzalez<sup>1</sup> Jenny Hardy Christopher Hartung Rupert Hope<sup>1</sup> Peter Hunsberger

#### US

Dmitri Batsev Christopher Blake Daniel Breslin Rhett Brown Gary Buesser Zoe Chen<sup>1</sup> Michael DeBernardis Martin Flood Miriam Kim Stephen (Kelly) Knybel Eugene Krishnan

Andrew Lacey<sup>2</sup> Jerry Liu Bret Miller Keith Mori Prateek Pant<sup>1</sup> David Pizzimenti Henry (Ross) Seiden Nicholas Sordoni Ronald Temple<sup>2</sup> Richard Tutino Christopher Whitney

#### Multi-regional (Global / EAFE)

Europe

Taras Ivanenko Jai Jacob<sup>1</sup> Robin Jones Peter Kashanek Edward Keating Tjeert Keijzer<sup>1</sup> Erianna Khusainova<sup>1</sup> John King Jessica Kittay Kipp Kjeldgaard Antony Knep Christopher Komosa<sup>1</sup> Werner Kraemer<sup>1</sup> Andrew Lacey<sup>2</sup> Alex Lai

Léopold Arminion

Aaron Barnfather

Christian Bockris

Jelena Boskovic

Nathan Cockrell

Giles Edwards

Robert Horton

Alex Ingham

Mark Lien

Alan Clifford

Alan Custis

Elias Chrysostomou

Patricia Biggers

Nitin Arora

Jay Leupp Mark Little Edward Lund Jean-Daniel Malan Stephen Marra<sup>1</sup> Kevin Matthews Thomas McManus<sup>1</sup> Neil Millar Adam Mitchell<sup>1</sup> Paul Moghtader Jonathan Morris John Mulquiney Sritharan Nadesan<sup>1</sup>

Marina Erskine-Leacock

Alistair Godrich

Ciprian Marin

Daniel Rozier

Guillaume Samama

Paul Selvey-Clinton

Laura Somers-Edgar

Susanne Willumsen

Llovd Whitworth

Jason Williams

Matthew Landv

Dennis Neveling Andrew Norris Mark Panter<sup>1</sup> Hubert Parzecki Michael Per<sup>1</sup> Christopher Pope Michael Powers John Reinsberg Sean Reynolds<sup>1</sup> Giuseppe Ricotta<sup>1</sup> Anthony Rohrlach David Ronco Edward Rosenfeld Patrick Ryan Craig Scholl Ulrich Schweiger Stephen Scott Victoire Spahn Jeremy Taylor Ronald Temple<sup>2</sup> Kim Tilley Yann Vasseur Kyle Waldhauer Barnaby Wilson Douglas Workman<sup>1</sup> Steve Wreford Ming Zhong

#### **Asia-Pacific**

Thurl Abrahams Matthew Bills Aaron Binsted Neal Doying Timothy Griffen Philipp Hofflin Takako Hoshino Andrew II-Kweon Dong Jaehyoun Ju Kaitlyn (Aekyung) Kim Se Hoon Kim Ario Kishida Jake (Jaeyub) Myung Takayuki Natsume Yeaseul (Jacqueline) Oh Rob Osborn Warryn Robertson Jason Tin Philippe Tison Shuichi Yoshimura Tim Zhao

Mohamed Abdel-Hadi Sleiman (Sam) Aboul Hosn Fadi Al Said David Barton Jagdish Bathija Georg Benes Thomas Boyle Rohit Chopra Elizabeth Chung Myla Cruz James Donald<sup>2</sup> Lada Emelianova

# EmergingMarketsDonald FloydJohn MarianoPeter GillespieErik McKee

John Mariano Erik McKee Jacob (Ryan) Mims Andrei Morosanu Walid Mourad Talal Noueihed Kevin O'Hare Paul Rogers Stephen Russell Timur Salikhov Rahwa Senay Monika Shrestha Ashish Shrivastava Sookyum (Celine) Woo Ben Wulfsohn

As of 30 September 2016.

1 Due to the nature of their activities, these individuals appear among both equity and fixed income resources.

2 Due to the nature of their responsibilities, these individuals have been assigned more than one primary regional focus.

# Lazard Equity Investment Resources Sector Expertise

#### Consumer

Aaron Binsted Christopher Blake Thomas Boyle Rohit Chopra Elizabeth Chung Nathan Cockrell Myla Cruz Marina Erskine-Leacock Stephen (Kelly) Knybel Jerry Liu Jake (Jaeyub) Myung Dennis Neveling Rob Osborn Sookyum (Celine) Woo Shuichi Yoshimura

#### Financials

Nigel Barrett Dmitri Batsev **Daniel Breslin** Adrian Cheung Elias Chrysostomou Gautam Garg Philipp Hofflin Kaitlyn (Aekyung) Kim Miriam Kim Antony Knep Jay Leupp Mark Lien Jonathan Morris David Ronco Stephen Russell Guillaume Samama Rahwa Senay Monika Shrestha Ronald Temple

#### Power

Georg Benes Bertrand Cliquet James Donald Alistair Godrich Peter Hunsberger Andrew II-Kweon Dong Eugene Krishnan Matthew Landy Neil Millar Jacob (Ryan) Mims John Mulquiney Warryn Robertson Anthony Rohrlach Ben Wulfsohn

#### Health Care

Thurl Abrahams Jelena Boskovic Rhett Brown John Mariano Henry (Ross) Seiden Nicholas Sordoni

#### Technology, Media, Telecom

Giles Edwards Donald Floyd Jenny Hardy Robert Horton Alex Ingham Ario Kishida Edward Lund Bret Miller Takayuki Natsume Paul Rogers Jeremy Taylor Christopher Whitney Tim Zhao

#### Industrials

Matthew Bills Jimmie Bork Michael DeBernardis Lada Emelianova Peter Gillespie Se Hoon Kim Kevin Matthews Erik McKee Keith Mori Andrei Morosanu Kevin O'Hare David Pizzimenti **Daniel Rozier** Victoire Spahn Jason Tin Philippe Tison



# Investment Philosophy, Objectives and Process

## **Our Investment Philosophy**

- Focus on those companies that are financially productive and inexpensively valued
- Add value through stock selection and portfolio management

## **Our Investment Objectives**

- Outperform relevant benchmark over a full market cycle
- Participate in rising markets; preserve capital in falling markets
- Outperform our investment competitors
- Seek consistent results

## **Our Investment Process**



Lazard's investment process for research and portfolio construction is presented here as sequential steps; in practice the process is neither static, nor sequential, but ongoing. Idea Sourcing is a collaboration of Lazard Asset Management's global resources

- Seeking strong and/or improving financial productivity at attractive valuations:
  - Quantitative screens
  - Sector specialists
  - Portfolio managers
  - Company meetings
- Identify industry/company inflection points
- Strategic/management changes

Daily meetings are scheduled to ensure complete sharing and communication of ideas among sector specialists and regional portfolio managers.

# **Fundamental Analysis**

## **Return Analysis**

Maximize understanding by:

- Leveraging sector expertise and relationships
- Identify key drivers of profitability
- Sustainability and directing financial productivity
- Links returns to valuation
- Management assessment
- Sensitivity analysis/macro scenarios

## Valuation

- Identify value drivers
- Fundamental valuation/margin/cash flow
- Current vs. historic valuation
- Valuation vs. peer group

## **Accounting Validation**

- Ensure financial statement support headline metrics
- Analyze management accounting choices
- Quantify significant risk factors
- Assess balance sheet strength and sustainability
- Corporate governance/ESG

## **Modeling/Investment Thesis/Insight**

- Incorporate identified discrepancies into financial model
- Identify catalyst
- Upside potential to target valuation/price
- Downside risk to valuation support level

## **Differentiated Investment Perspective and Insight**

# **Portfolio Construction**

## **Buy Discipline**

**Portfolio construction** is driven by stock selection:

- Relative to existing holdings
- Impact on portfolio structure
- Impact on risk metrics
- Client mandate and objectives

## **Sell Discipline**

Review of investment thesis is triggered when:

- Performance objective is achieved
- New ideas offer more attractive risk/reward
- Fundamental drivers change or thesis is invalidated

## Portfolio team makes final determination

# Investment Process Example Total S.A.

**Company Overview:** Total is an all-weather integrated major oil company positioned to navigate through the oil price trough and still provide ample gearing to eventual oil price recovery.

**LAM History w/ Company:** LAM energy analyst, Peter Hunsberger, is a geologist, has been at Lazard for 25 years and meets with senior management of Total (and other energy producers) several times per year. Additionally, Peter monitors quarterly company earnings and other significant announcements, makes fields trips and attends industry conferences. Peter writes up significant company and industry news and circulates his analysis to Portfolio Mangers. Total has been owned in Lazard portfolios several times in the last 25 years.

**Differentiated Insight:** Total is in the "sweet spot" of falling costs, rising production and possibly rising oil prices at a time of cheap valuation.

#### **Idea Sourcing:**

- Oil prices fell by half in the year preceding our purchase, heightening our interest in energy given our expectations for an eventual supply reduction response.
- Total brings sufficient financial resilience, attractive valuation and company-specific drivers.
- PM team regularly meets with Energy team to review opportunity set and industry developments.
   Former Total CEO, Christophe de Margerie, killed in a plane crash in Oct. 2014. Peter met with new CEO, Patrick Pouyanne, several times to asses his impact on the company.

#### **Fundamental Research View:**

- Total is better positioned than peers to weather downturn, while still offering significant potential for cash flow recovery.
- Strong, capable management: New CEO, Patrick Pouyanne, and team are laser-focused on aggressively driving costs lower while simultaneously delivering new major capital projects. Message from management is that they will do whatever it takes to return Total to being cash flow positive in 2017. <u>Return Analysis</u>
  - Capex is set to decline from \$26bn in 2014 to \$20bn or less in 2017. Spending decline will be helped by: 1) roll-off of spending on major projects; 2) hiatus on approving new projects; and 3) cost deflation.
  - Opex cost reduction targets are equally ambitious, with Total aiming to cut 2017 opex by \$3bn compared to 2014 levels.
  - New developments coming on stream over the 2015-18 period will underpin mid-single digit production growth, with management pointing to 6-7% CAGR from 2014-17 and 5% from 2014-19.

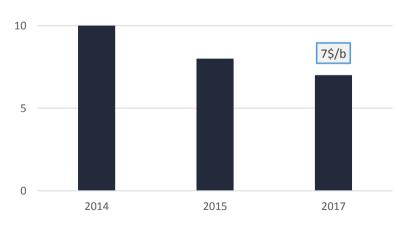
#### Organic Capex and DD&A

\$В

\$/boe







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As of 31 December 2016 Source: Company Reports, LAM Estimates

The information provided in this material is for illustrative purposes only and should not be considered a recommendation or solicitation to purchase or sell any security. Estimated data is not a promise or guarantee of future results and is subject to change. There is no assurance that any securities referenced herein will remain in the account's portfolio or that securities sold have not been repurchased. The securities discussed may not represent the account's entire portfolio. It should not be assumed that any of the referenced securities were or will prove to be profitable, or that the investment decisions we make in the future will be profitable. Provided pursuant to the request of Sacramento Regional Transit District. Not for further distribution.

# Investment Process Example Total S.A.

#### Fundamental Research View (cont.):

- Moreover, new production is expected to have higher cash margins than the base business due to production mix (more oil-linked production), more favorable fiscal terms and lower unit costs.
- Cash flow inflection approaching: Total is approaching a 'sweet spot' in its investment cycle, with production and cash flow set to increase, while capex declines as major projects are completed. We expect to see a significant cash flow inflection in 2016, with further improvement in 2017-18.
- As capex moves lower and new projects begin to contribute cash, financial productivity should begin to inflect higher from current low levels. A recovery in oil prices toward \$60/bbl will further underpin an improving ROCE.
- Balance sheet is sufficiently strong, with net debt/cap under 30% and credit rating still strong.
- \$10bn asset disposal program for 2015-17 will help narrow near-term cash flow deficit, as will scrip dividend issuance in 2015.

#### Valuation

 Valuation is very inexpensive on price/book, which looks through current commodity price weakness. Total trading at just 1.1x book, near the low end of its 10-year range. We project 20%+ upside to price objective, plus a 6% dividend yield. (NB: We do NOT expect a dividend cut.) Our bull case objective implies 35%+ total return.

#### Accounting Validation

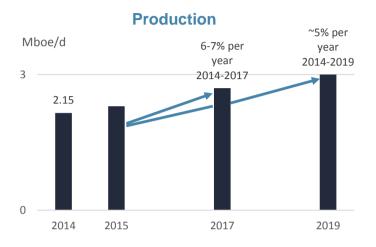
 Accounting validation: Total reports under IFRS accounting, consistent with European oil peers. Total uses 'successful efforts' accounting for its Upstream operations, consistent with other major oil peers and most large cap US E&Ps. Auditors have provided a clean fairness opinion.

#### **ESG**

 Total and certain European peers called for the development of carbon pricing mechanisms at the UN Framework Convention on Climate Change, in June 2015. Separately, Total is taking steps to be more energy efficient and environmentally sensitive, including plans to reduce continuous flaring and to improve the energy efficiency of the company's facilities. Additionally, Total is investing more than peers in solar energy.

#### **Portfolio Construction:**

- Initial purchase in August 2015 at 1% position size. Purchasing Total moved the portfolio from a slight underweight in energy to a modest overweight.
- Position was sold in November 2016 with a small gain and with positive attribution in a down oil market. The sale proceeds were used to fund the purchase of higher-conviction Statoil.



Price to Book



#### 18 Lazard Asset Management

As of 31 December 2016, Source: Company Reports, LAM Estimates

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# Three Levels of Risk Monitoring A Solid Foundation





# Distinguishing Features Lazard International Equity Strategies

- Robust bottom up relative value culture and process
  - Buy stocks, not markets
  - Relative Value trade-off between financial productivity and valuation
  - Borderless alpha generation
  - Strong emerging markets expertise

## Exploiting market inefficiencies

- Sustainability of returns
- Structural change
- Short term focus on news flow

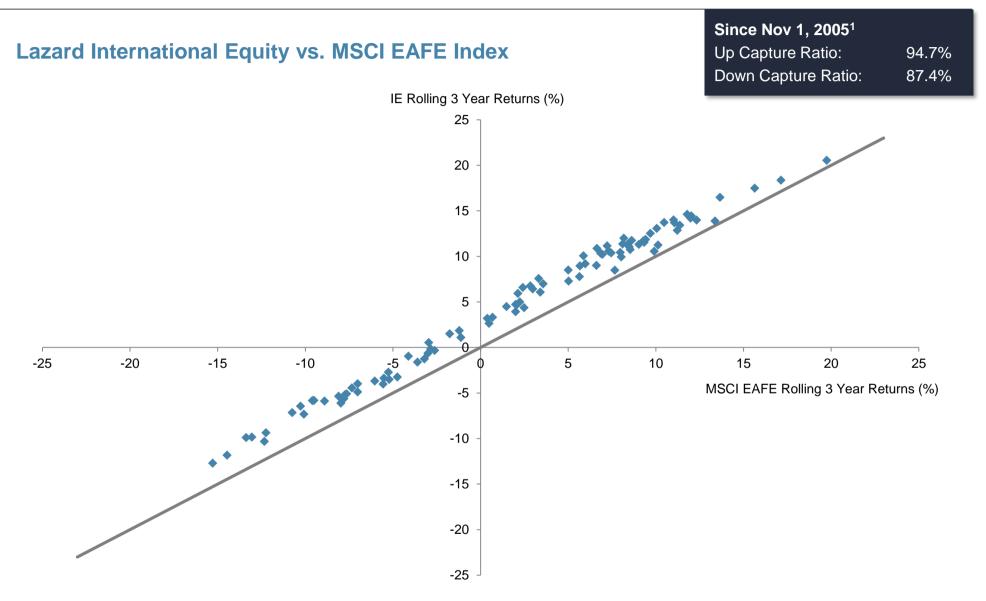
## Flexibility of implementation

- Market Cap
- Geography
- Sectors

## Historically consistent and attractive pattern of performance

- Downside protection with upside participation
- Attractive risk-adjusted returns

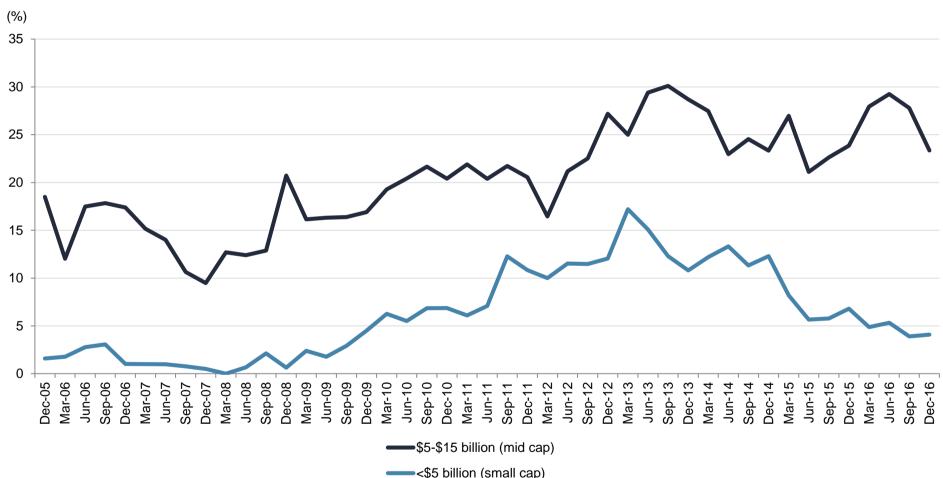
# Outperformance/Underperformance Rolling 3 Year Annualized Returns



As of 31 December 2016. All data in USD.

1 Please note data represented is from 1 November 2005, when Michael Fry joined the team as the lead portfolio manager. Portfolio inception is 1 June 1995. Performance is presented gross of fees. This information is supplemental to the composite performance and is provided for illustrative purposes only. Please refer to the attached disclosures for complete composite performance, performance presented on a net-of-fee basis and for a description of this composite. The performance quoted represents past performance. Past performance is not a reliable indicator future results. Source: Lazard, MSCI

# **Capitalization Exposure History** Lazard International Equity



### **Historical Portfolio Breakdown by Market Capitalization**

As of 31 December 2016

Please note data represented is from 1 November 2005, when Michael Fry joined the team as the lead portfolio manager. Portfolio inception is 1 June 1995.

Please note that cash is not illustrated above. Cash is not viewed as a strategic asset.

The allocations mentioned are based upon a portfolio that represents the proposed investment for a fully discretionary account. Allocations and security selection are subject to change.

This information is for illustrative purposes only and is supplemental to the "GIPS® Composite Information."

# Holdings by Sector Lazard International Equity

Industrials			2.3		% of % Lazard EAF			% of % Lazard EA			<b>% of</b> % Lazard EA	of MSCI FE Index
inuusinais			2.3	Consumer			Financials (cont.)			Information		
				Discretionary	14.8	12.5	Direct Line			Technology	6.6	5.5
Consumer				ABC-MART			KBC			Cap Gemini		
Discretionary			2.3	Don Quijote			National Bank of Canada			SAP		
,				Informa			Provident Financial			Taiwan Semiconductor		
				Isuzu			Prudential			Materials	5.1	7.9
Energy			2.1	Michelin			Sampo			Air Liquide		
				RTL Group			SMFG			BHP		
				Signet			Swedbank			James Hardie		
Information		1	1	Sony			Turkiye Garanti			Real Estate	2.6	3.7
Technology		'	. 1	United Arrows			Health Care	8.3	10.7	Daiwa House		
				Valeo			Novartis			Telecom Services	3.5	4.5
				Consumer Staples	12.0	11.2	Shire			KDDI		
Consumer Staples		0.	8	Anheuser-Busch InBev			Teva			KPN		
				British American Tobacco			Industrials	16.3	14.0	Telenor		
				Carlsberg			Airbus			Utilities	0.9	3.4
<b>Telecom Services</b>	-1.0			Diageo			Alliance Global			Red Electrica		
				Japan Tobacco			Assa Abloy			Cash & Equivalents	4.5	0.0
				Seven & I			Canadian National Railway	1		Total Portfolio	100.0	100.0
Real Estate	-1.1			Unilever			Hoshizaki					
Itea Estate	-1.1			Energy	7.6	5.5	Howden Joinery					
				Caltex			Macdonald Dettwiler					
				Royal Dutch Shell			Makita					
Health Care	-2.4			Statoil			RELX					
				Suncor			Ryanair					
				Financials	17.7	21.2						
Utilities	-2.5			Aon			Wolseley					
				Azimut			Wolters Kluwer					
	_			BB Seguridade								
Materials	20											
Ivialeriais	-2.0											
	_											
<u> </u>												
Financials	-3.5											
	-5	0	5									
	Active	Weight	(%)									

As of 31 December 2016

Allocations and securities mentioned are based upon a portfolio which represents the proposed investments for a fully discretionary account. Allocations and security selection are subject to change. This information is for illustrative purposes only and is supplemental to the "GIPS® Composite Information."

The securities mentioned are not necessarily held by Lazard for all client portfolios, and their mention should not be considered a recommendation or solicitation to purchase or sell these securities. It should not be assumed that any investment in these securities was, or will prove to be, profitable, or that the investment decisions we make in the future will be profitable or equal to the investment performance of securities referenced herein. There is no assurance that any securities referenced herein are currently held in the portfolio or that securities sold have not been repurchased. The securities mentioned may not represent the entire portfolio.

Source: Lazard, MSCI

# Holdings by Country Lazard International Equity

Jnited Kingdom		8.9		% of % of MSCI Lazard EAFE Index			% of % of MSCI Lazard EAFE Index			% of % of MSC Lazard EAFE Inde	
Shirou Hinguoni		0.5	Australia	2.6	7.4	Israel	1.8	0.7	Sweden	3.6	2.8
			Caltex			Teva			Assa Abloy		
			James Hardie			Italy	0.8	2.1	• · · • • • • • • · · · ·		
			Austria	0.0	0.2				Switzerland	3.8	8.7
<b>N U A U</b>			Belgium	3.4	1.2	Japan	18.1	24.1	Novartis		
North America		5.8	Anheuser-Busch InBev			ABC-MART			Taiwan	2.2	0.0
			KBC			Daiwa House			Taiwan Semiconductor		
			Brazil	1.1	0.0	Don Quijote			Turkey	0.6	0.0
			BB Seguridade			Hoshizaki			Turkiye Garanti		
			Canada	5.8	0.0	Isuzu			United Kingdom	27.2	18.3
nerging Markets		4.3	Canadian National Railway			Japan Tobacco			Aon		
			Macdonald Dettwiler			KDDI			BHP		
			National Bank of Canada			Makita			British American Tobacco		
			Suncor			Seven & I			Diageo		
			Denmark	1.1	1.6	Sony			Direct Line		
Middle East		1.1	Carlsberg			SMFG			Howden Joinery		
Middle Edot			Finland	2.4	1.0	United Arrows			Informa		
			Sampo			Netherlands	2.6	3.3	Provident Financial		
			France	10.3	10.2	KPN			Prudential		
			Air Liquide			Wolters Kluwer			RELX		
			Airbus			New Zealand	0.0	0.2	Royal Dutch Shell		
Japan	-6.0		Cap Gemini			Norway	2.6	0.7	Shire		
			Michelin			Statoil			Signet		
	_		Valeo			Telenor			Unilever		
			VINCI			Philippines	0.3	0.0			
			Germany	3.1	9.3				Cash & Equivalents	4.5	0.0
Continental	-9.1		RTL Group			Portugal	0.0	0.2	Total Portfolio	100.0	100.0
Europe	-		SAP			Singapore	0.0	1.2			
			Hong Kong	0.0	3.2	•	0.9	3.1			
			Ireland	1.1	0.5	Red Electrica					
			Ryanair								
Acia av Janan	-9.5										
Asia ex-Japan	-9.0										

As of 31 December 2016

-20 -10

0

Active Weight (%)

10

Allocations and securities mentioned are based upon a portfolio which represents the proposed investments for a fully discretionary account. Allocations and security selection are subject to change. This information is for illustrative purposes only and is supplemental to the "GIPS® Composite Information."

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Source: Lazard, MSCI

# Parameters and Characteristics Lazard International Equity

	Lazard International Equity
Primary Market Capitalization Range	Generally > \$3.0 billion
Range of Holdings	60-80
Relative Value Focus	Value
Reference Client Benchmark	MSCI EAFE
Allowable Sector/Country Exposure	0% – Benchmark +10%
Allowable Emerging Markets Exposure	0% –10%
Active Share (%)	87.2
Top Ten Holdings (%)	28.0

	Lazard International Equity	MSCI EAFE		
P/E FY1	16.4 x	16.4 x		
ROE NTM	15.5%	10.6%		



# Composite Performance Summary Lazard International Equity

## Performance as of 31 December 2016 (%)

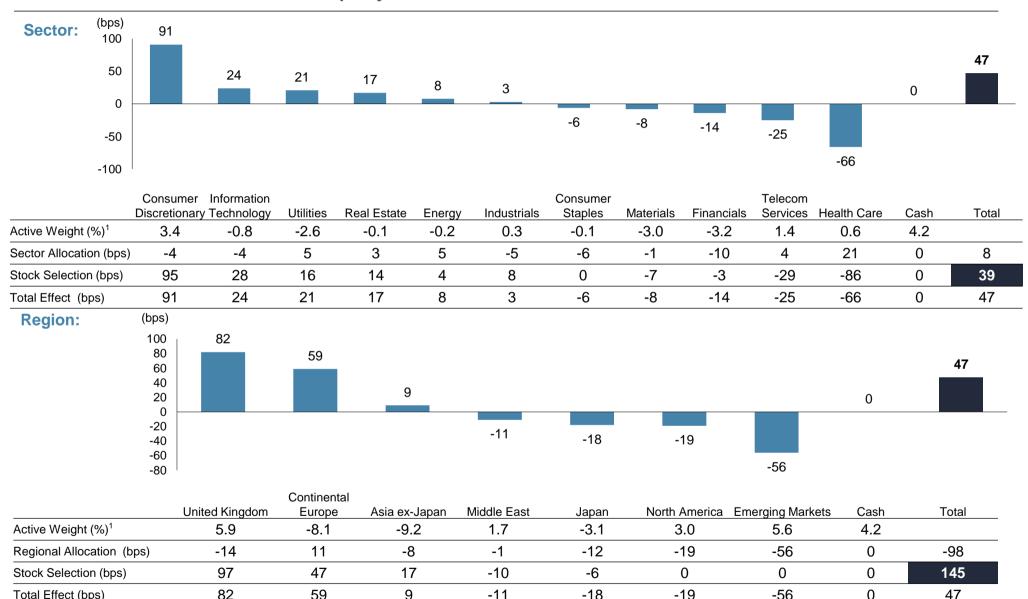
		Annualized						
	1 Year	3 Years	5 Years	Since Inception 1 Jun 1995				
Lazard International Equity	-3.78	-1.37	7.68	6.40				
MSCI EAFE Index	1.00	-1.60	6.53	4.45				
Excess Return (bps)	-478	+23	+115	+195				

	2015	2014	2013	2012	2011	2010	2009	2008	2007	2006
Lazard International Equity	2.40	-2.63	23.86	21.86	-6.91	7.96	27.05	-37.25	12.09	24.07
MSCI EAFE Index	-0.81	-4.90	22.78	17.32	-12.14	7.75	31.78	-43.38	11.17	26.34
Excess Return (bps)	+321	+227	+108	+454	+523	+21	-473	+613	+92	-227

All data in USD.

Performance is presented gross of fees. Please refer to "GIPS® Composite Information" for additional information, including net-of-fee results. The performance quoted represents past performance. Past performance is not a reliable indicator of future results..

## Attribution – 3 Year Lazard International Equity vs. MSCI EAFE Index



As of 31 December 2016. All data shown in USD and reflects rounding.

1 Active weight reflects the Lazard International Equity average weight subtracted by the MSCI EAFE Index average weight.

\*During the 3 year period, the portfolio's annualized weighted emerging market return was -12.2% versus -2.6% for the MSCI Emerging Markets Index.

The allocations mentioned are based upon a portfolio that represents the proposed investment for a fully discretionary account. Allocations are subject to change.

Attribution is based upon a representative portfolio and is versus the benchmark noted. Attribution analysis is provided for illustrative purposes only, as values are calculated based on returns gross of fees. Performance would be lower if fees and expenses were included. Past performance is not a reliable indicator of future results. This information is for illustrative purposes only and is supplemental to the "GIPS® Composite Information."

29 Lazard Asset Management

Source: Lazard, MSCI



# Summary

## **Robust bottom-up relative value investment process**

- Favorable trade-off between valuation and financial productivity
- Focus on both valuation and financial productivity helps avoid "value traps"
- Borderless alpha generation capability

## Seeks to provide a strong pattern of performance

- Aims to achieve downside protection, good upside participation
- Seeks attractive risk adjusted returns

## **Complete opportunity set**

- Use full capitalization spectrum to seek attractive ideas
- Strong emerging markets expertise

## **Proactive client-service / partnership**



# Biographies Lazard International Equity



#### Michael G. Fry

Managing Director, Portfolio Manager/Analyst Lazard Asset Management Limited (London)

Michael G. Fry is a Portfolio Manager/Analyst on various international equity teams. He began working in the investment field in 1981. Prior to joining Lazard in 2005, Michael was Head of Global Equity Portfolio Management, Global Head of Equity Research and Head of Australian Equities with UBS Global Asset Management, and was also previously with Armstrong Jones Fund Management, Schroder Investment Management, and Price Waterhouse in Australia. He has a BE from Flinders University, Australia. Michael is a member of the Institute of Chartered Accountants in Australia and an associate of the Financial Services Institute of Australia.



#### Michael A. Bennett

Managing Director, Portfolio Manager/Analyst Lazard Asset Management LLC (New York)

Michael Bennett is a Managing Director of Lazard Asset Management and a Portfolio Manager/Analyst on various international equity teams. He also coordinates the activities of Lazard Asset Management's Investment Council. Michael began working in the investment field in 1986. Prior to joining Lazard in 1992, Michael was with G.E. Investment Corporation, Keith Lippert Associates and became a CPA while at Arthur Andersen. He has an MBA from University of Chicago and a BS in Accounting from New York University.



#### Giles Edwards, CFA, ACMA

Vice President, Portfolio Manager/Analyst Lazard Asset Management LLC (London)

Giles Edwards is a Portfolio Manager/Analyst on the International Equity, International Equity Select, and International Concentrated teams. Prior to joining the investment teams, he was a Research Analyst with a background in media, automotive, and services. Prior to joining Lazard in 2008, Giles was a Management Accountant at BSkyB, completing his CIMA qualifications. He has a BA (Hons) in Politics and Economics from the University of Newcastle upon Tyne.

# Biographies Lazard International Equity



#### Kevin J. Matthews, CFA

Managing Director, Portfolio Manager/Analyst Lazard Asset Management LLC (New York)

Kevin Matthews is a Portfolio Manager/Analyst on the International Equity and International Equity Select teams. Prior to joining the investment teams, he was a Research Analyst with a background in financials, automotive, aerospace, and capital goods sectors. He began working in the investment field in 2001 when he joined Lazard. Kevin has a BA in Politics and Philosophy from St. Chad's College, Durham University.



#### Michael Powers

Managing Director, Portfolio Manager/Analyst Lazard Asset Management LLC (New York) Michael Powers is a Portfolio Manager/Analyst on various international equity teams. He began working in the investment field in 1990 when he joined Lazard. Michael has an MBA from Long Island University and a BA from Brown University.



#### John R. Reinsberg

Deputy Chairman, International and Global Strategies Lazard Asset Management LLC (New York)

John Reinsberg is Deputy Chairman of Lazard Asset Management responsible for oversight of the firm's international and global strategies. He is also a Portfolio Manager/Analyst on the Global Equity and International Equity portfolio teams. He began working in the investment field in 1981. Prior to joining Lazard in 1992, John was Executive Vice President with General Electric Investment Corporation and Trustee of the General Electric Pension Trust. He was also previously with Jardine Matheson (Hong Kong) and Hill & Knowlton, Inc. John has an MBA from Columbia University and a BA from the University of Pennsylvania. He is an Overseer of the University of Pennsylvania School of Arts and Sciences, Chairman of the University of Pennsylvania Huntsman Program Advisory Board, a Trustee of the NPR Foundation (National Public Radio), a Member of the Board of Directors of the Alliance for Cancer Gene Therapy, and a Member of the Board of Directors).

# Biographies Lazard Institutional Client Service



#### **George Sands**

Director, Institutional Sales & Client Service Lazard Asset Management LLC (San Francisco)

George Sands is a Director on the Public Funds Institutional Sales and Client Services team. He began working in the investment field in 1980. Prior to joining Lazard in 2015, George was Senior Vice President and Head of Client Services with Pathway Capital Management. Previously he was Vice President and Head of Institutional Services for Dimensional Fund Advisors. He has a BA in Economics from St. Francis College.

# GIPS Composite Information Lazard International Equity

Benchmark:MReporting Date:3Composite Inception Date:0Reporting Currency:U

MSCI EAFE Index 30 September 2016 01 June 1995 U.S. Dollar

#### **Composite Description**

The composite returns represent the total returns of all fully discretionary portfolios with an International Equity investment mandate and a minimum of \$5 million in assets under management. Lazard International Equity seeks to generate strong relative returns over a market cycle by investing in companies with strong and/or improving financial productivity at attractive valuations. The strategy typically invests in securities of non-US companies, including those from emerging markets, with a market capitalization generally of \$3 billion or greater. The emerging markets equity allocation is implemented by investing in individual securities.

#### **Calculation of Performance Returns**

Lazard's account inclusion policy is the first full month or the end of the month in which the account is fully invested. The returns of the individual portfolios within the composite are time-weighted, use trade date accounting, are based upon monthly portfolio valuations, and include the reinvestment of all earnings as of the payment date. The composite returns are asset-weighted based upon beginning period market values. Additional information regarding policies for valuing portfolios, calculating performance, and preparing compliant presentations are available upon request. Composite returns are shown before taxes and the deduction of custody fees (except for mutual funds which includes all fees). Exchange rates for composite accounts and the benchmark are normally based on the 16:00 GMT fix, with the exception of US Mutual Fund valuation exchange rates, which are based on the 21:00 GMT fix. The composite and benchmark returns are reported net of foreign withholding taxes on dividends, interest and capital gains. The composite returns presented represent past performance and is not a reliable indicator of future results, which may vary. As of April 1, 2010, this composite changed its name from International Equity with Emerging Markets Securities to International Equity.

#### Fee Schedule

Lazard's standard fee schedule for International Equity accounts is 0.75% of the first \$100 million of assets and 0.50% of the balance. (This fee schedule may be presented in non-US local currency equivalents based on prevailing exchange rates.) Actual account fees, inclusive of performance-based fees (if applicable) are used in the construction of composite net of fee performance unless otherwise noted. A complete list and description of all Lazard composites is available upon request.

#### **Benchmark Information**

The MSCI Europe, Australasia, Far East Index (EAFE) is an arithmetic, market value-weighted average return net of dividends taxation which is derived from over 900 securities listed on the stock exchanges of countries in Europe, Australasia and the Far East. The Index is compiled by Morgan Stanley Capital International.

#### **GIPS** Compliance and Verification Status

Lazard Asset Management claims compliance with the Global Investment Performance Standards (GIPS®) and has prepared and presented this report in compliance with the GIPS standards. Lazard Asset Management has been independently verified for the period of January 1, 1993 through December 31, 2015. The verification reports are available upon request. Verification assesses whether (1) the firm has complied with all the composite construction requirements of the GIPS standards on a firm-wide basis and (2) the firm's policies and procedures are designed to calculate and present performance in compliance with the GIPS standards. Verification does not ensure the accuracy of any specific composite presentation. Lazard Asset Management is the "Firm" to which the GIPS Standards apply (Frankfurt office included in Firm definition as of January 1, 2003). GIPS is a registered trademark of CFA Institute. CFA Institute has not been involved in the preparation or review of this presentation. The composite creation date is January 2002.

						Cale	endar								Annualize	ed	
	QTD	YTD	2015	2014	2013	2012	2011	2010	2009	2008	2007	2006	1 YR	3 YR	5 YR	10 YR	Since Inception
Lazard Rate of Return (%; Gross of Fees)	3.66	0.29	2.40	-2.63	23.86	21.86	-6.91	7.96	27.05	-37.25	12.09	24.07	4.53	2.65	9.74	4.01	6.69
Lazard Rate of Return (%; Net of Fees)	3.53	-0.08	1.93	-3.14	23.23	21.07	-7.62	7.23	26.15	-37.63	11.46	23.56	4.01	2.15	9.14	3.39	6.22
Benchmark (%; Rate of Return)	6.43	1.73	-0.81	-4.90	22.78	17.32	-12.14	7.75	31.78	-43.38	11.17	26.34	6.52	0.47	7.39	1.82	4.53
Composite Standard Deviation (3-yr. Ann.)		11.53	11.61	12.68	15.50	18.41	21.04	23.75	21.02	16.80	9.11	9.60					
Benchmark Standard Deviation (3-yr. Ann.)		12.38	12.46	13.03	16.25	19.37	22.43	26.23	23.58	19.24	9.43	9.33					
# of Portfolios		12	11	9	5	5	6	6	5	3	3	3					
Composite Dispersion (Asset Wtd. Std. Dev.)		0.24	0.23	0.25	0.12	0.58	0.32	0.51	1.65	0.53	0.10	N/A					
Composite Assets (USD Millions)		7567.3	5560.9	3913.3	3015.8	2437.4	1198.4	1519.3	1331.9	1036.6	2035.7	2465.7		<b>36</b>   L	azard Asset	Managemen	it
Total Firm Assets (USD Billions)		177.7	160.1	171.4	161.6	148.3	124.4	140.6	116.5	79.8	126.9	97.7					

# **Important Information**

Equity securities will fluctuate in price; the value of your investment will thus fluctuate, and this may result in a loss. Securities in certain non-domestic countries may be less liquid, more volatile, and less subject to governmental supervision than in one's home market. The values of these securities may be affected by changes in currency rates, application of a country's specific tax laws, changes in government administration, and economic and monetary policy. Emerging market securities carry special risks, such as less developed or less efficient trading markets, a lack of company information, and differing auditing and legal standards. The securities markets of emerging market countries can be extremely volatile; performance can also be influenced by political, social, and economic factors affecting companies in emerging market countries.

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# Fee Schedule & Terms Summary Lazard/Wilmington International Equity Portfolio

Lazard/Wilmington International Equity Collective Trust Inception Date: 5/30/14 AUM as of 09/30/16: \$686m Subscriptions & Redemptions: Daily Dividend and Gain Distributions: None Expected Custodian: State Street Bank and Trust Company Auditor: PricewaterhouseCoopers

#### Fee Schedule – Share Class 2

Management fee\*: 70 bps Other Estimated expenses: 10 bps (cap) Total fee: 80 bps



# US Natural Gas Outlook

January 2017

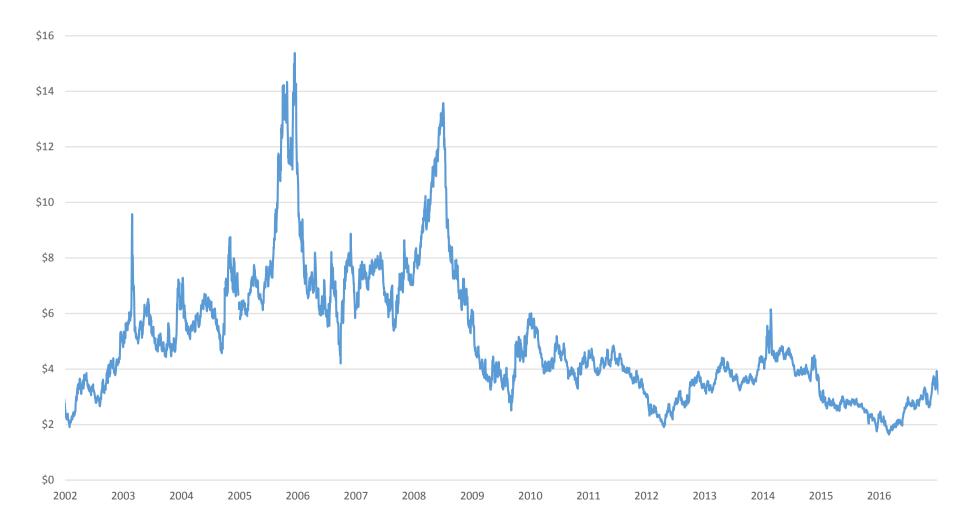
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Provided pursuant to the request of Sacramento Regional Transit District. Not for further distribution.

### US Natural Gas Prices 15 Years

• Natural gas prices remain well below 2003-2008 levels seen prior to impact of US shale supply.

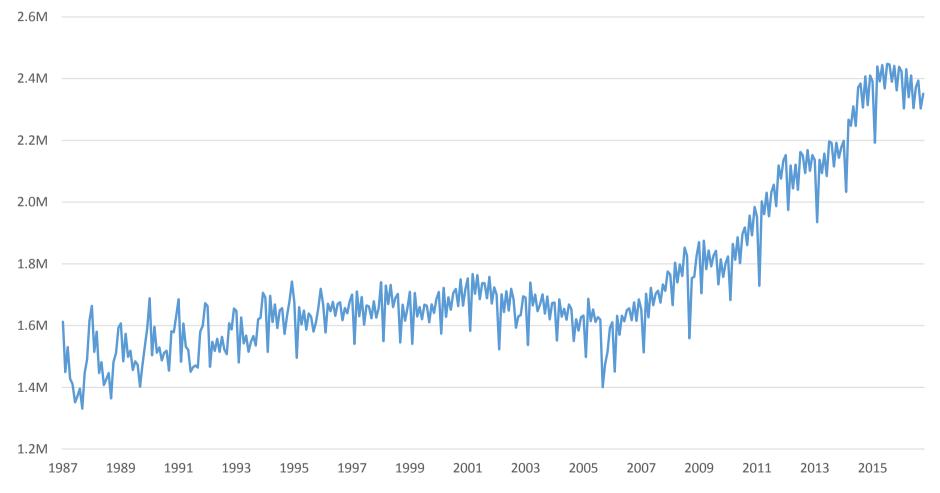


Information and opinions as of 31 December 2016 and are subject to change. For illustrative purposes only. Source: Lazard, Bloomberg

1 Lazard Asset Management

# US Natural Gas Marketed Production 30 Years

- Gas supply remains resilient despite the sharp decline in gas drilling.
- Why? Ample low-cost supply coming from Marcellus and from 'associated gas' in oil shale plays.



Information and opinions as of 31 December 2016 and are subject to change. For illustrative purposes only. Source: Lazard, Bloomberg

#### US Natural Gas Prices 1 Year

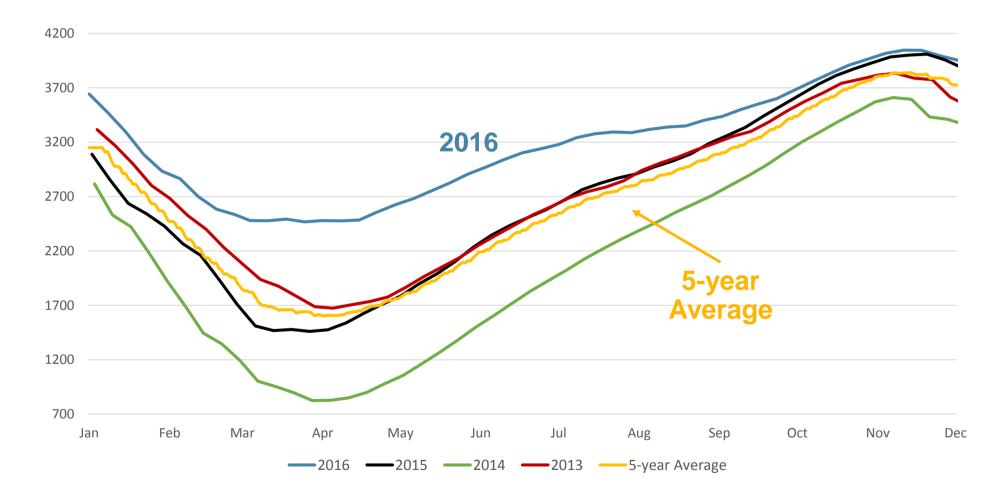
• Front month gas price is ~\$3.30/mcf, nearly doubling off the weatherimpacted low of March 2016.



Information and opinions as of 31 December 2016 and are subject to change. For illustrative purposes only. Source: Lazard, Bloomberg

#### US Natural Gas Inventories 5 Years, Seasonally Adjusted

• US gas inventories were above the top end of the 5-year range for most of 2016, reflecting a warm 2015-16 winter (= low demand).

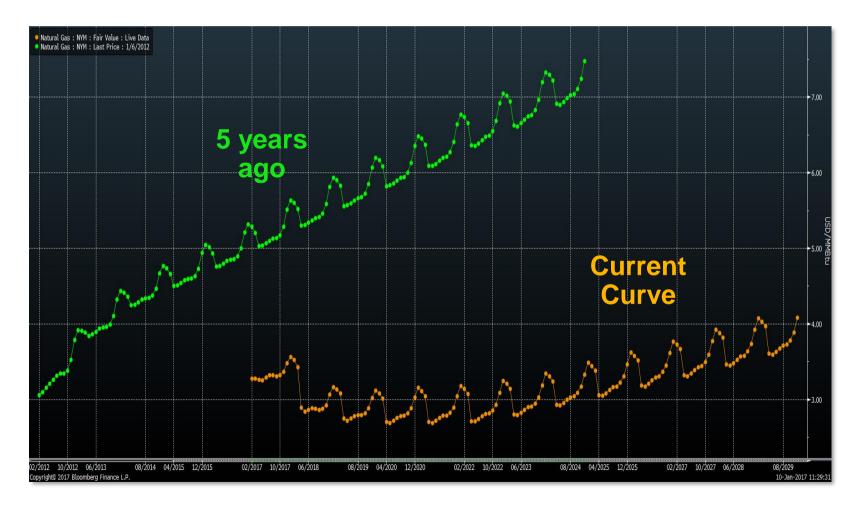


Information and opinions as of 31 December 2016 and are subject to change. For illustrative purposes only. Source: Lazard, Bloomberg

4 Lazard Asset Management

# **US Natural Gas Futures Curve**

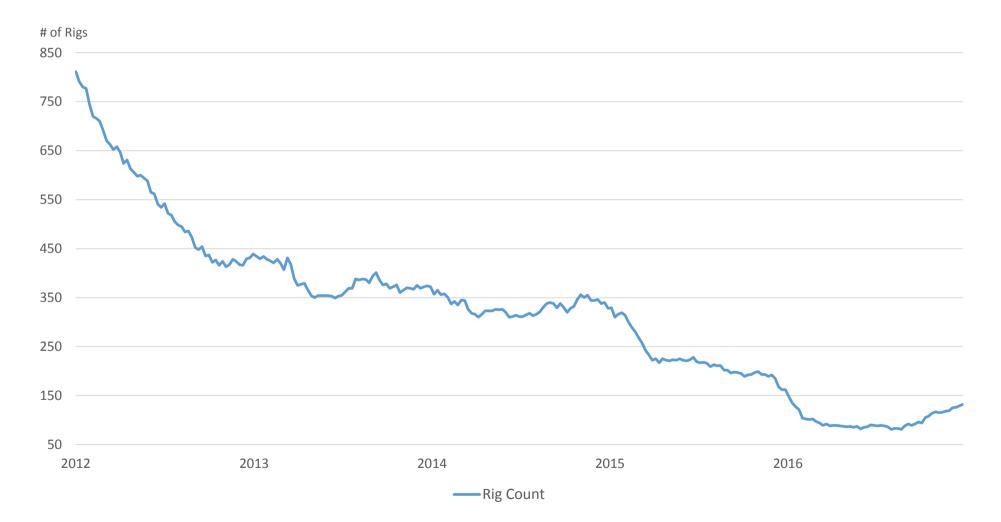
- Futures market expectations have shifted materially lower
- Current curve sees gas trading at \$2.75-3.50/mcf over most of the next 7-8 years (equivalent to ~\$17-21/bbl of oil).



Information and opinions as of 31 December 2016 and are subject to change. For illustrative purposes only. Source: Lazard, Bloomberg

# US Gas Rig Count 5 years

 Rig count is up 50 units (or 65%) since August but remains 80-85% below where it was five years ago.



Information and opinions as of 31 December 2016 and are subject to change. For illustrative purposes only. Source: Lazard, Bloomberg

# Conclusion

- US natural gas prices have recovered from weather-induced lows under \$2/mcf in March 2016.
- Futures market suggests gas will trade in \$2.75-3.50/mcf range over most of next 7-8 years.
- We expect US gas prices to remain 'cheap' compared to oil and to global LNG in coming years (providing competitive advantage to US customers).
- Gas demand likely to increase due to industrial demand growth, LNG exports and power generation shift from coal to gas/solar/wind.



#### **Presentation to: Sacramento Regional Transit District** International Equity (US\$)

#### **Presented by:**



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Kamila Kowalke Director – Institutional Sales BMO Global Asset Management

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> **Pyrford International** Data as at 31 December 2016

For institutional investors only Ref. 0032017



# Why Pyrford?

#### Attractive returns with low downside capture

#1 Rule: Avoid losing moneyAbsolute rather than relative view of risk

#### • Comprehensive, rigorous process delivering expected results

Rigorous bottom up research and top-down macro analysis Total return approach Portfolio with characteristics that outperform over time

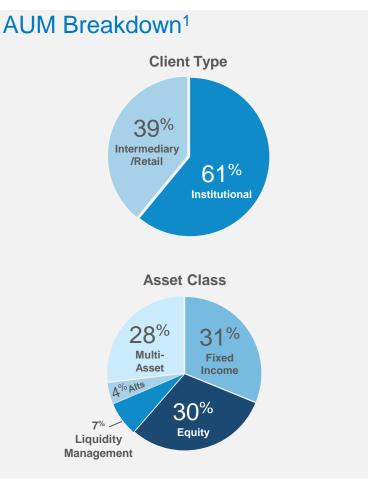
#### • Stable team and firm

29 years of experience managing international equity Stable experienced team aligned with clients' interest Total investment autonomy supported by the resources of BMO

#### **BMO Global Asset Management overview**

#### What sets us apart

- Global presence
   Part of the BMO Financial Group Managing
   \$234 billion globally
- Specialized investment teams Independent teams that are empowered to deliver strong, consistent results while minimizing unnecessary risk.
- Culture of partnership and innovation Working in partnership with clients to create and deliver innovative solutions.



1 As of September 30, 2016. AUM includes \$76.7 billion managed by BMO Global Asset Management (Canada), \$51.5 billion managed by BMO Global Asset Management (U.S.), \$106.9 billion managed by BMO Global Asset Management (EMEA), \$2.4 billion managed by LGM Investments, \$1.9 billion managed by Monegy, \$9.8 billion managed by Pyrford International, \$10.7 billion managed by Taplin, Canida & Habacht, and \$8.92 billion managed by BMO Real Estate Partners.

2 Pensions & Investments (P&I) Largest Money Managers – Ranking of investment management firms based on worldwide assets under management. For the year ended December 31, 2015.

AUM includes both discretionary and non-discretionary assets. Figures are adjusted to avoid double-counting of assets sub-advised by boutiques.



#### Pyrford's organisational overview

- Established 1987
- Stable professional staff
- 14 investment professionals
- 135 investors\* (US\$9.67 billion as at 31 December 2016)

Name	Role	Years with Pyrford	Years in industry
Tony Cousins, CFA	Chief Executive & Chief Investment Officer	28	32
Paul Simons, CFA	Head of Portfolio Management – Asia-Pacific	20	20
Daniel McDonagh, CFA	Head of Portfolio Management - Europe	19	19
Suhail Arain, CFA	Head of Portfolio Management – the Americas	8	19
Bruce Campbell	Strategic Investment Advisor	30	47

\* These figures include investors in pooled investment vehicles.

# Responsibilities of Pyrford's investment professionals

31 December 2016

			Years with Pyrford	Years in Industry
Tony Cousins	Investment Strategy	Chairman of Global Stock Selection Committee and Investment Strategy Committee	28	32
Bruce Campbell	Investment Strategy	Strategic Investment Advisor	30	47
Asian Team				
Paul Simons Head of Asia	Discretion Analysis	Australia; New Zealand; Korea; Thailand; Malaysia; Hong Kong; China; Indonesia India; Japan; Philippines; Taiwan	20	20
Jun Yu	Discretion Analysis	Taiwan; India Hong Kong; China	8	17
Stefan Bain	Discretion Analysis	Japan; Philippines Korea; Australia	5	15
Roderick Lewis	Discretion Analysis	Singapore Malaysia; Thailand; Indonesia	3	15
Bethan Dixon	Discretion Analysis	n/a All Asian Markets	2	2
European Team				
Daniel McDonagh Head of Europe	Discretion Analysis	UK; Switzerland Eurozone; Scandinavia; Israel; Turkey	19	19
Peter Moran	Discretion Analysis	Eurozone (Netherlands; Spain; Belgium; Portugal; Finland; Ireland; Greece); Sweden; Norway; Israel; Turkey; South Africa n/a	13	13
Nabil Irfan	Discretion Analysis	Eurozone (Germany; France; Italy; Austria); Denmark n/a	11	16
Anneka Desai	Discretion Analysis	n/a Europe	1	1
Americas Team				
Suhail Arain Head of Americas	Discretion Analysis	USA; Canada Mexico	8	19
Andrew Sykes	Discretion Analysis	Brazil; India USA; Canada	3	9
Henrietta Brooks	Discretion Analysis	n/a USA; Canada; Brazil	2	2

Discretion: authority to make investment decisions subject to CIO veto.

Analysis: authority to make investment recommendations subject to veto by investment professional with discretion or CIO.



# International Equity (EAFE)

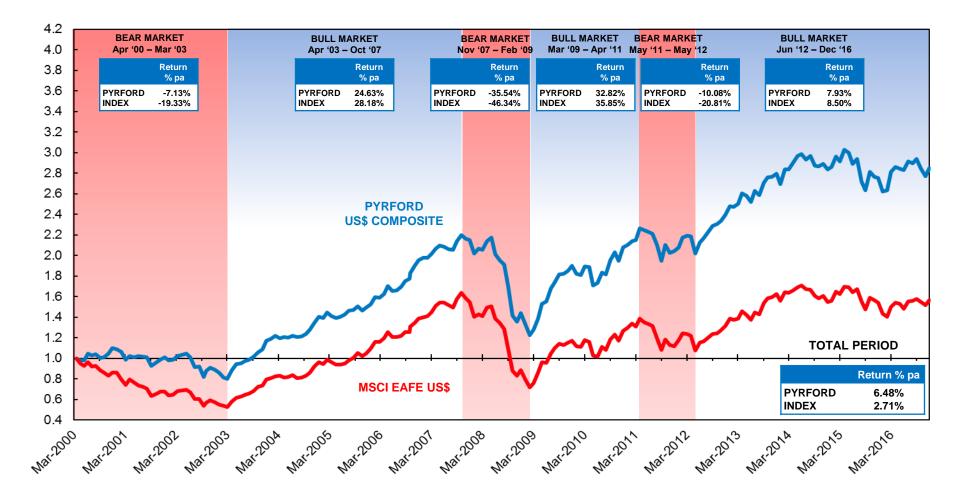
Protect the downside – enjoy the upside

Growth of a unit value USD, 31 March 2000 - 31 December 2016. Bull & bear markets

 31 March 2000 – 31 December 2016 (quarterly data)

 Downside Capture
 62.01%

 Upside Capture
 86.45%



Performance relates to the gross of fees Pyrford International Ltd 'International Equity (Base Currency US\$) Composite'. This is supplementary information. Please see complete GIPS compliant presentation at the end of this document. **Past performance does not guarantee future results.** 



Pyrford International | 6

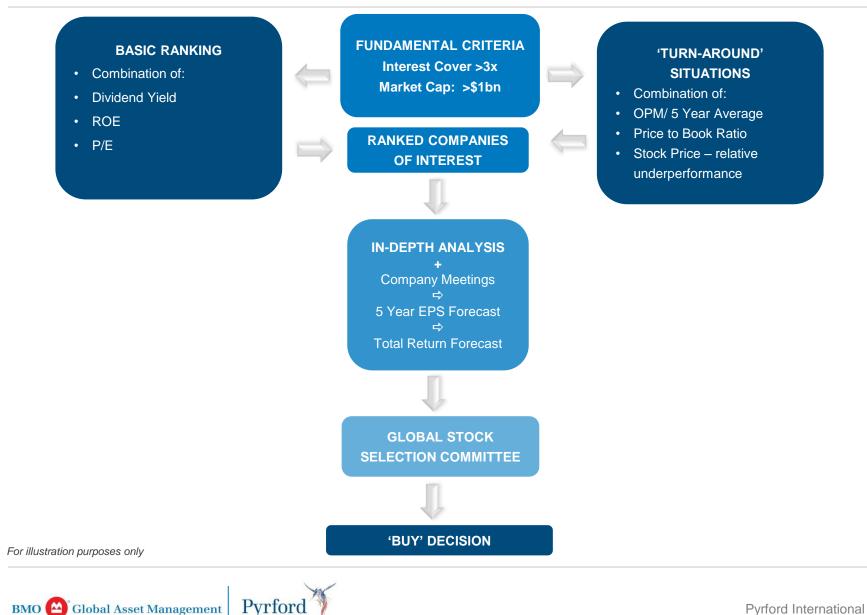
# Pyrford's investment philosophy

- Five year time horizon
- Total return approach ⇒ Dividend Yield + 5 year Earnings Growth forecast
  - Applies to country and stock analysis
- "Absolute" not "relative" risk possible zero weight in any country, sector or stock
  - Key to controlling risk
  - "we won't invest in a company or country simply because it's big"
- Not index oriented
- Low absolute volatility
- Low portfolio turnover

### **Country analysis**

- We embrace macro-economic analysis to assist in portfolio allocation
- Total return forecast by country on a five year view
  - A combination of top-down and bottom-up analysis
- Avoid markets representing poor value
  - e.g. Japan in the 1990s
- Current investable universe of 33 countries, including 10 not included in the MSCI Developed Markets
   Indices

#### Pyrford screening and stock selection process



#### Total – process in action

- Initial purchase made in 1993
- Why we bought it:
  - Impressive reserve replacement record
  - > Industry leading access to lucrative Middle East and African projects
  - Substantial gas assets
  - > Proven exploration and production project management skills

#### Recent company meetings:

Date	Date With	
13 February 2014	Christophe de Margerie, Chairman and CEO	London
11 June 2014	Martin Deffontaines, Investor Relations	Paris
TT June 2014	Guillaume Chalmin, Vice President Strategy for Exploration & Production	Pails
15 December 2014	Nicolas Fumex, Investor Relations	London
12 January 2015	Patrick de La Chevardiere, CFO	London
12 February 2016	Helle Kristoffersen, Senior Vice President Strategy & Business Intelligence	London
23 September 2016	Ladislas Paszkiewicz, Senior Vice President of Mergers & Acquisitions	London



#### Total – why we continue to own it

- Current value indicator: 7.5%
- Attractive 5% dividend yield
- Is the dividend sustainable?
  - > CAPEX shuffle guidance for \$15-17bn p.a. 2017-20
  - Production growth aiming to achieve 5% p.a. on average up to 2020
  - Operating cost savings targeting \$4bn opex reduction 2015-18
  - > Asset sales ongoing disposal of non-core assets
  - Balance sheet support gearing at 30%
  - Scrip issuance reducing the cash cost of the dividend







### Strategy portfolio construction

- Portfolio of 70 100 stocks
- Model country allocation determined by Investment Strategy Committee, comprising Tony Cousins, Paul Simons, Daniel McDonagh, Suhail Arain and Bruce Campbell
  - Minimum country weight 0%, maximum country weight driven by size and volatility of each market
- Stock selection by country
  - Country portfolio manager determines which stocks
  - New sales and purchases presented to full global investment team
  - New positions tend to be initially small
- All client portfolios identical (subject to investment restrictions)
- Quarterly rebalancing back to model weightings
- Overall 'check' by CIO

#### **Sell decisions**

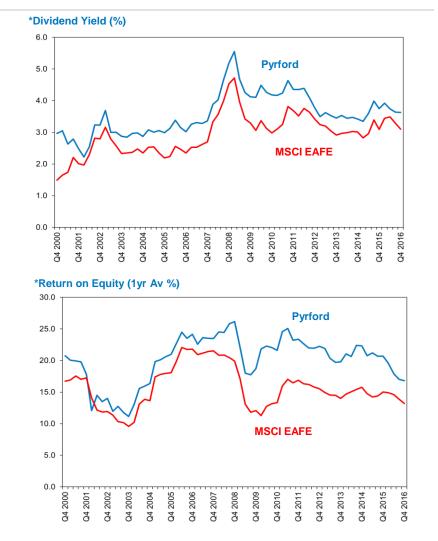
- Competition of ideas we need to make space for a stock with better valuation fundamentals
- Valuation a good stock has become too expensive
- A material change in our assessment of the company's fundamentals
- An overall change to portfolio positioning reduce country weight

# International Equity (EAFE) Strategy – portfolio characteristics

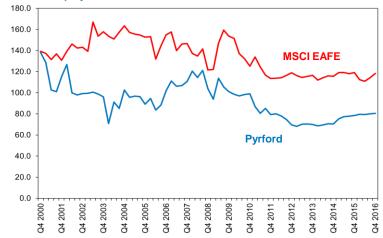
As at 31 December 2016

\*Dividend Yield, Debt to Equity & Return on Equity line charts contain quarterly data

	Pyrford	MSCI EAFE
Dividend Yield %	3.6	3.1
Debt to Equity	80.6	118.3
Return on Equity (1yr Av %)	16.8	13.2







Source: Style Research.

Based on equity holdings of a representative account. This is supplementary information. Please see full GIPS compliant performance disclosure at the end of this document **Past performance does not guarantee future results.** 



### International Equity (EAFE) strategy model portfolio

% allocations - as at 31 December 2016

EUROPEAN EQUITIES	
EURO AREA	24.00%
AIR LIQUIDE SA (France)	1.68%
BRENNTAG AG (Germany)	1.44%
DEUTSCHE POST AG (Germany)	1.68%
FUCHS PETROLUB AG (Germany)	1.68%
GEA GROUP (Germany)	0.96%
KONE (Finland)	0.96%
LEGRAND SA (France)	1.20%
PROXIMUS SA (Belgium)	1.20%
RELX GROUP (The Netherlands)	1.20%
ROYAL DUTCH SHELL PLC 'A' (The Netherlands)	1.44%
RUBIS (France)	1.20%
SAMPO (Finland)	0.96%
SANOFI (France)	2.16%
SAP AG (Germany)	1.44%
TOTAL SA (France)	1.44%
UNILEVER NV (The Netherlands)	1.92%
VOPAK (The Netherlands)	1.44%
SWITZERLAND	14.00%
GIVAUDAN	0.70%
NESTLE SA	3.50%
NOVARTIS AG	2.87%
PANALPINA WELTTRANSPORT	0.84%
ROCHE HOLDING AG	3.22%
SCHINDLER HOLDING	0.70%
SYNGENTA AG	0.70%
ZURICH INSURANCE GROUP AG	1.47%

EUROPEAN EQUITIES	
SWEDEN	4.50%
ASSA ABLOY AB	0.90%
ATLAS COPCO AB	1.80%
SVENSKA CELLULOSA AB	1.80%
NORWAY	2.00%
TELENOR ASA	2.00%

EUROPEAN EQUITIES	
лк	15.50%
BP PLC	0.93%
BRITISH AMERICAN TOBACCO PLC	2.02%
GLAXOSMITHKLINE PLC	1.71%
LEGAL & GENERAL GROUP PLC	1.71%
NATIONAL GRID PLC	2.02%
ROYAL DUTCH SHELL PLC 'B'	1.09%
SKY PLC	1.40%
SSE PLC	1.40%
UNITED UTILITIES GROUP PLC	1.55%
VODAFONE GROUP PLC	1.71%

ISRAEL	1.50%
BEZEQ THE ISRAELI TELECOM CO	0.60%
TEVA PHARMACEUTICAL INDUSTRIES LTD	0.90%

ASIA-PACIFIC EQUITIES	
AUSTRALIA	10.50%
BRAMBLES LTD	2.05%
COMPUTERSHARE LTD	1.63%
NEWCREST MINING LTD	0.84%
QBE INSURANCE GROUP LTD	1.10%
RIO TINTO LTD	0.86%
TELSTRA CORP LTD	0.53%
WOODSIDE PETROLEUM LTD	1.73%
WOOLWORTHS LTD	1.76%
HONG KONG	7.00%
ASM PACIFIC TECHNOLOGY	1.40%
CHINA MOBILE LTD	1.82%
CNOOC LTD	1.19%
POWER ASSETS HOLDINGS LTD	1.23%
VTECH HOLDINGS LTD	1.37%
JAPAN	9.00%
ABC-MART	0.72%
JAPAN TOBACCO	1.44%
KDDI CORP	1.62%
MITSUBISHI ELECTRIC CORP	1.53%
NIHON KOHDEN	1.26%
SUMITOMO RUBBER INDUSTRIES	1.26%
TOYOTA TSUSHO CORP	1.17%

ASIA-PACIFIC EQUITIES	
MALAYSIA	3.00%
AXIATA GROUP BHD	1.50%
MAGNUM BHD	0.30%
MALAYAN BANKING BHD	1.20%
SINGAPORE	5.00%
COMFORTDELGRO CORP LTD	0.70%
SEMBCORP INDUSTRIES LTD	0.65%
SINGAPORE TECH ENGINEERING	1.60%
UNITED OVERSEAS BANK LTD	1.35%
VENTURE CORP LTD	0.70%
TAIWAN	4.00%
ADVANTECH CO LTD	0.80%
CHUNGHWA TELECOM CO LTD	1.40%
MEDIATEK INC	1.40%
MERIDA INDUSTRY CO LTD	0.40%

# International Equity (EAFE) strategy model portfolio

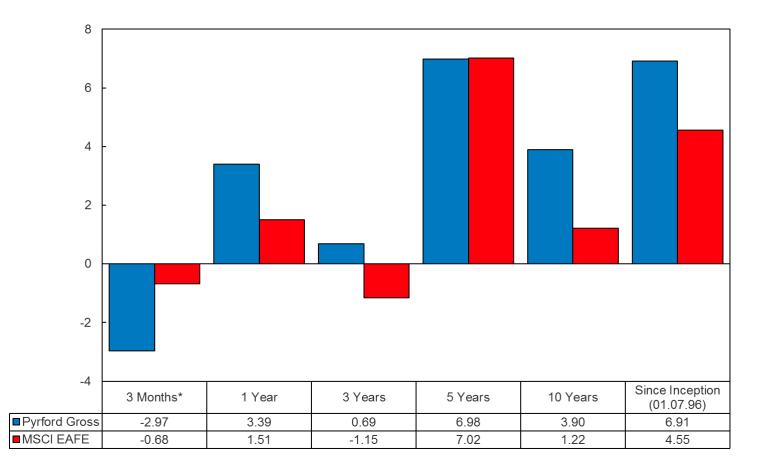
Sector allocations - as at 31 December 2016

INDUSTRY GROUP		PYRFORD MODEL WEIGHTING (%)		MSCI EAFE WEIGHTING (%)		
ENERGY	9.3%		5.4%			
ENERGY		9.3%		5.4%		
MATERIALS	6.5%		7.8%			
MATERIALS		6.5%		7.8%		
INDUSTRIALS	18.2%		14.3%			
CAPITAL GOODS		12.9%		9.7%		
COMMERCIAL & PROFESSIONAL SERVICES		2.0%		1.7%		
TRANSPORTATION		3.2%		3.0%		
CONSUMER DISCRETIONARY	5.3%		12.4%			
AUTOMOBILES & COMPONENTS		1.3%		5.2%		
CONSUMER DURABLES & APPAREL		1.1%		3.0%		
CONSUMER SERVICES		0.3%		1.4%		
MEDIA		2.6%		1.3%		
RETAILING		0.0%		1.5%		
CONSUMER STAPLES	12.4%		11.1%			
FOOD & STAPLES RETAILING		1.8%		1.7%		
FOOD BEVERAGE & TOBACCO		8.9%		6.7%		
HOUSEHOLD & PERSONAL PRODUCTS		1.8%		2.7%		
HEALTH CARE	12.1%		10.6%			
HEALTH CARE EQUIPMENT & SERVICES		1.3%		1.6%		
PHARMACEUTICALS BIOTECHNOLOGY & LIFE SCIENCE		10.9%		8.9%		
FINANCIALS	7.8%		21.0%			
BANKS		2.6%		12.4%		
DIVERSIFIED FINANCIALS		0.0%		3.1%		
INSURANCE		5.2%		5.5%		
INFORMATION TECHNOLOGY	8.7%		5.4%			
SOFTWARE & SERVICES		3.1%		2.2%		
SEMICONDUCTORS & SEMICONDUCTOR EQUIPMENT		2.8%		1.0%		
TECHNOLOGY HARDWARE & EQUIPMENT		2.9%		2.3%		
TELECOMMUNICATION SERVICES	12.4%		4.9%			
TELECOMMUNICATION SERVICES		12.4%		4.9%		
UTILITIES	7.4%		3.4%			
UTILITIES		7.4%		3.4%		
REAL ESTATE	0.0%		3.7%			
REAL ESTATE		0.0%		3.7%		



#### International Equity EAFE strategy - performance

Annualised returns – gross of fees (%) to 31 December 2016. USD.



\* Not annualised

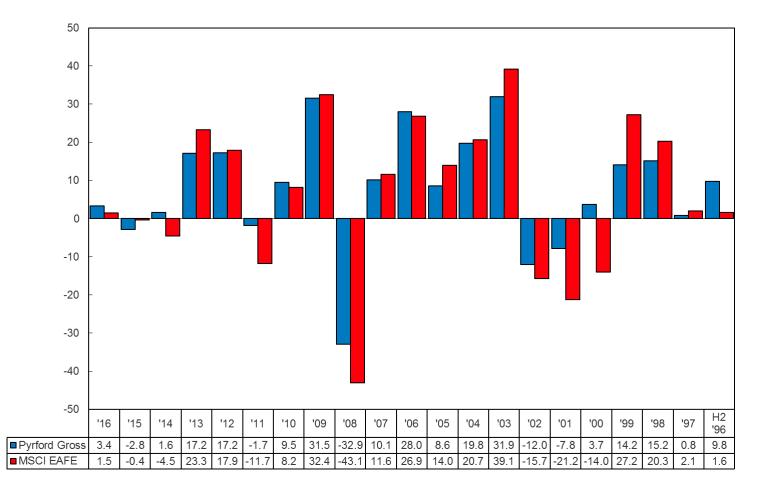
Performance relates to the gross of fees Pyrford International Ltd 'International Equity (Base Currency US\$) composite' which comprises all fully discretionary, international equity accounts with a market value greater than US\$10m, a base currency of US\$ and no hedging restrictions. The date of inception is 1 July 1996.

Past performance does not guarantee future results. Please see full GIPS compliant performance disclosure at the end of this document.



#### International Equity EAFE strategy - performance

Calendar year returns to 31 December 2016 - USD.



Performance relates to the gross of fees Pyrford International Ltd 'International Equity (Base Currency US\$) composite' which comprises all fully discretionary, international equity accounts with a market value greater than US\$10m, a base currency of US\$ and no hedging restrictions. The date of inception is 1 July 1996. Past performance does not guarantee future results. Please see full GIPS compliant performance disclosure at the end of this document.



#### Pyrford seeks to deliver:

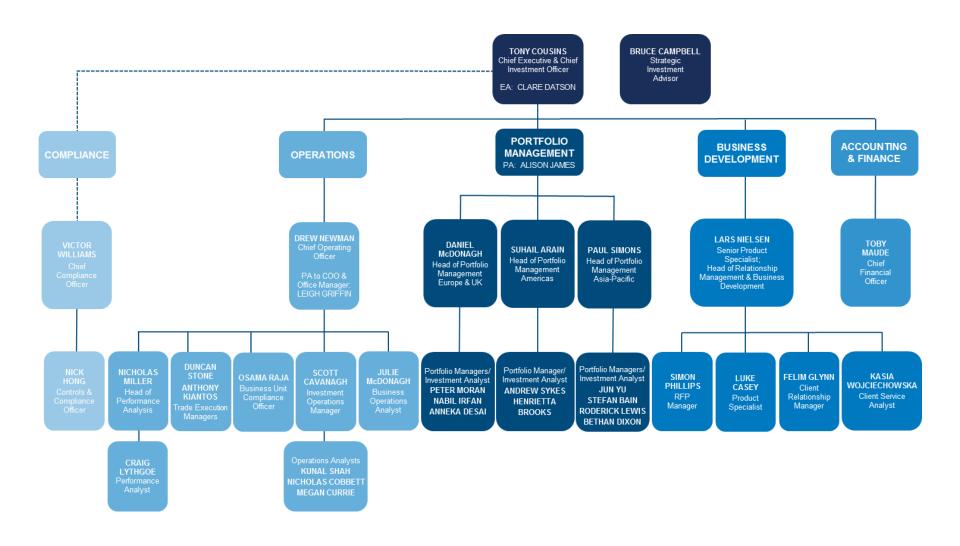
- Excellent long-term historical performance with low absolute volatility of returns
- A focus on absolute returns benchmark agnostic
- Effective downside protection
- Disciplined, consistent approach
- Comprehensive macro and micro economic analysis
- Integrity and independence
- Committed and personal level of service

### Supplementary information index

- Pyrford's organisation chart
- Pyrford's professionals
- Responsibilities of Pyrford's investment professionals
- Assets under management breakdown
- Representative clients
- Country allocation
- Pyrford screening & stock selection process
- Sample of purchasing power parity analysis
- Performance International Equity
- Risk/Reward International Equity
- Rolling 5-year absolute volatility
- Pyrford's current views
- Fees
- Sample stock sheet
- Performance disclosures

#### Pyrford's organisational chart

31 December 2016



# Pyrford's professionals – Investment Strategy Committee

31 December 2016



Tony Cousins MA (Hons), CFA Role: Chief Executive & Chief Investment Officer Years with: Pyrford 28 Industry 32

After graduating from Cambridge University in 1985 with a Bachelor of Arts, Tony joined Daiwa International Capital Management in London as an Equity Portfolio Manager. He joined Pyrford in 1989 and obtained his Master of Arts and became a CFA charter-holder in 1990.

Tony headed Pyrford's European and UK investment management activities for Pyrford for almost 20 years and was promoted to the position of Joint Chief Investment Officer in November 2009. On 1 January 2011 Tony was further promoted to the roles of Chief Executive and Chief Investment Officer.



Bruce Campbell B Com (Hons) Role: Strategic Investment Advisor Years with: Pyrford 30 Industry 47

Bruce has over 40 years' experience in the international investment industry. After graduating from Melbourne University in 1969 Bruce managed the investment operations of an Australian based general insurance company for 12 years and then founded the predecessor company to Pyrford in Melbourne in 1982 – at that stage as part of the multi-national Elders IXL group. In 1987 Bruce moved the investment operations to London and in 1991 headed the buy-out of the investment management subsidiary from the Elders organisation. At that time the company's name was changed to Pyrford International.

Bruce remained Chief Executive and Chief Investment Officer until 31 December 2010 at which time he took up the role of Investment Chairman.

Bruce retired from Pyrford on 31 March 2015 and became a Strategic Investment Advisor to Pyrford on 01 April 2015.



Paul Simons MA (Hons), CFA Role: Head of Portfolio Management Asia-Pacific

Years with: Pyrford 20 Industry 20

Paul joined Pyrford in 1996 after graduating from Oxford University with a degree in geography. He began his fund management career in 1997 and spent seven years covering South East Asia, Hong Kong, Taiwan, Korea and Australasia before being promoted to the role of Portfolio Manager for Australia and New Zealand in 2003. Paul became a CFA charter holder in 2000, as well being awarded his Master of Arts. Paul was appointed Head of the Asia-Pacific team and a member of the Investment Strategy Committee in 2008.



Daniel McDonagh MA (Hons), CFA Role: Head of Portfolio Management Europe & UK Years with: Pyrford 19 Industry 19

Daniel joined Pyrford in October 1997 after graduating from Oxford University with a degree in Politics and Economics. Daniel worked as a research analyst within the European portfolio management team prior to his promotion to Portfolio Manager in 2003. He became a CFA charter holder in 2000, was appointed Head of Europe and the UK in October 2009 and was awarded his Master of Arts in 2010.



Suhail Arain, LLB (Hons) ACA MSc, CFAYeaRole: Head of Portfolio ManagementPyrfaAmericasIndu

Years with: Pyrford 8 Industry 19

Suhail joined Pyrford in September 2008 as a Portfolio Manager covering North American equities. Prior to joining Pyrford, Suhail worked at Scottish Widows as a global equities portfolio manager and research analyst covering a number of sectors including the energy, telecommunication and technology sectors. He has over 18 years experience in the asset management industry with particular emphasis in US and global equities. Suhail graduated from King's College, London with a degree in Law and completed a Masters' in Finance from London Business School. He is also a qualified chartered accountant and holds the CFA designation. Suhail has also held positions at KPMG, Hambros Merchant Bank (in corporate finance), Prudential and ABP Investments.

# Pyrford's professionals

31 December 2016



Peter Moran, MA (Hons), CFA Role: Portfolio Manager Team: Europe & UK

Peter joined Pyrford in October 2003 having previously worked for Culross Global Management and Merrill Lynch. In 2001 he graduated from Oxford University with a degree in History. Peter worked as a research analyst within the European portfolio management team until November 2009 at which time he was promoted to the position of Portfolio Manager. He became a CFA charter holder in 2007.



Nabil Irfan BSc (Hons), CFA Role: Portfolio Manager Team: Europe & UK

FA Years with: Pyrford 11 Industry 16

Years with:

Pyrford 13

Industry 13

Nabil joined Pyrford in September 2005 as a research analyst within the European portfolio management team. In November 2009 he was promoted to the position of Portfolio Manager. Prior to joining Pyrford Nabil worked for 5 years at JPMorgan Asset Management in Equity Research as a Utilities Analyst, and prior to that as a research assistant in their technology, media and telecoms (TMT) team. Nabil graduated from University College London with an Economics degree in September 2000 and became a CFA charter holder in 2004.

Jun Yu BA MBA, CFA Role: Portfolio Manager Team: Asia-Pacific

Years with: Pyrford 8 Industry 17

Jun joined Pyrford in October 2008 and is a Portfolio Manager in the Asia portfolio management team with a focus on stock selection in Hong Kong and Taiwan. She has worked in a number of investment businesses in both China and London and most recently was an equity sales person for Daiwa SMBC Europe. She has a degree in Literature from Shanghai International Studies University and an MBA from INSEAD in Paris. Jun is a native Mandarin speaker.



**Stefan Bain, MSc** Role Portfolio Manager Team: Asia-Pacific

Years with: er Pyrford 5 Industry 15

Stefan joined Pyrford in June 2012 as a Portfolio Manager covering Japanese and South Korean companies within the Asian portfolio management team. Prior to joining Pyrford Stefan worked for F&C Fund Management in London for five years as a Director of Japanese Equities, and at Royal London for six years as a Japanese fund manager. Stefan has a degree in Investment Analysis from the University of Stirling and is an Associate of the Institute of Investment Management and Research.



Andrew Sykes BA (Hons), CFA Role: Investment Analyst Team: Americas Industry 9

Andrew joined Pyrford in July 2013 as an Investment Analyst covering North America and was promoted to Portfolio Manager in 2015 to cover Latin America. Andrew's previous roles include 3 years in portfolio management roles covering Global markets at Schroders and most recently Senhouse Capital. He graduated from Oxford University in 2005 with a BA (Hons) degree in Politics, Philosophy & Economics. Andrew is a CFA charter holder.



Roderick Lewis BSc, CFA Role: Portfolio Manager Team: Asia-Pacific

Roderick joined Pyrford in November 2013 as an Investment Analyst in the Asia portfolio management team. Roderick holds a BSc in Economics and Management from Cardiff University and is a CFA Charter holder. He joins Pyrford following 6 years on the Asian team at Legal and General in London and a further 3 analysing Asian equities at CCLA Investment Management.



Henrietta Brooks, BA (Hons) Role: Investment Analyst Team: Americas

Henrietta graduated from Cambridge University in 2013, having completed a BA (Hons) degree in Natural Sciences - Pharmacology, and a BA (Hons) in the Management Studies Tripos at the Judge Business School. Prior to joining Pyrford Henrietta completed a 6 month internship with Ardian, (ex-AXA Private Equity).



Bethan Dixon, BSc Role: Investment Analyst Team: Asia-Pacific

Bethan joined Pyrford in October 2014 with a degree in Natural Science from the University of Bath. As part of her degree Bethan spent a year on an Industrial Placement with the Investor Relations team at Lloyds Banking Group.



Anneka Desai, BA (Hons) Role: Investment Analyst Team: Europe & UK Years with: Pyrford 1 Industry 1

Anneka joined Pyrford in October 2015 after graduating in June 2015 with a BA (Hons) degree in Economics from Cambridge University.



Years with:

Industry 15

Years with:

Pyrford 2

Industry 2

Years with:

Pvrford 2

Industry 2

Pvrford 3

Lars Nielsen, BSc MSc Role: Senior Product Specialist Head of RM & BD Years with: Pyrford 8 Industry 28

Lars has overall responsibility for all client oriented activities at Pyrford. He has over 25 years' experience in the asset management industry. Prior to joining Pyrford, Lars worked in similar roles at Dalton Strategic Partnership, TT International and Alliance Capital. Lars started his career in various roles at Barra, one of the world's leading investment analytics companies. He spent 9 years there and his last position was as a Director for the US equity money manager business. Before going to the US he held positions in the European part of the business. Lars graduated from Aarhus Business School in his native Denmark with a MSc and BSc in Business Administration with a concentration in Finance. Also studied at Aarhus University mathematics department and San Francisco State University MBA program.



Luke Casey, CFA, CAIA Role: Product Specialist

Years with: Pyrford 1 Industry 14

Luke joined Pyrford in July 2015 as a Product Specialist. Prior to Pyrford Luke spent several years in a similar role covering Emerging and Asia Pacific strategies at T Rowe Price, having previously covered fixed income strategies at Goldman Sachs Asset Management. He holds a BSc in Business and Finance from the University of Brighton and has earned the Chartered Financial Analyst and Chartered Alternative Investment Association designations.





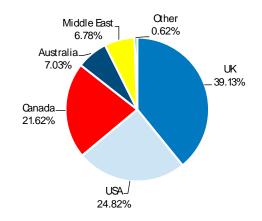
## Assets under management breakdown

As at 31 December 2016

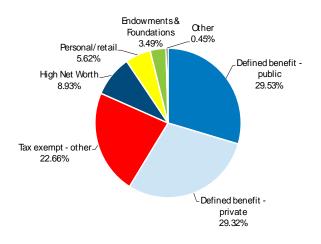
Product	USD	No. of Clients*
Global Absolute Return	4.84bn	72
International Equities	3.41bn	45
Global Equities	1.40bn	13
Shariah Compliant Equities	17.77m	4
Asia Pacific ex-Japan Equities	1.21m	1
Total	9.67bn	135

\* This figure includes investors in pooled investment vehicles.

#### AUM by investor domicile



#### AUM by investor type





## **Representative clients**

31 December 2016

Corporate	Inception
AETC Pension Scheme	2002
Canon (UK) Retirement Benefit Scheme	1994
Consolidated Edison Retirement Trust	2013
Nissan Pension Plan	2012
Robert Bosch Master Retirement Trust	2011
Stagecoach Group Pension Scheme	2004
D.E UK Pension Plan	2012
VHA Inc	2010
Western Union Pension Plan	2011
Wyman-Gordon Ltd Retirement Benefits Plan	2002

Funds/Subadvisory	Inception
BMO Funds (Canada)	2008
BMO Funds (US)	2011
BMO Nesbitt Burns	2008
Kayne Anderson Rudnick Investment Management LLC	2009

Foundation & Endowments; Charities	Inception
Boy Scouts of America	2003
Corporation of London Bridgehouse Estates	2004
Eton College Employees (1972) Pension & Life Assurance Scheme	2012
University of Glasgow Pension Scheme	2013
The Samuel Roberts Noble Foundation Inc	2005
University of Utah	2011

Trade Union & Taft Hartley	Inception
Teamsters Local 639 - Employers Pension Trust Fund	2013
UNISON Staff Pension Scheme	2013

Insurance	Inception
Amerisure Mutual Insurance Company	2003
Premera Blue Cross	2015

Government/Public Funds	Inception
Alberta Teachers' Retirement Fund Board	1997
Avon Pension Fund	2013
The British Columbia Investment Management Corp	1994
Bedfordshire Pension Fund	2012
Clwyd Pension Fund	2011
Contra Costa County Employees' Retirement Association	2014
Corporation of London Pension Fund	2004
Highland Council	2012
Illinois Student Assistance Commission	2010
Kent County Council Superannuation Fund	2012
London Borough of Barking and Dagenham Pension Fund	2012
London CIV Ltd	2016
London Borough of Sutton Pension Fund	2012
Public Institution for Social Security Kuwait	2006
Royal Borough of Kensington & Chelsea Pension Fund	2011
Royal Borough of Kingston upon Thames Pension Fund	2014
Suffolk County Council Pension Fund	2012
State of Wyoming	2012

Clients that are listed were not selected by performance criteria and Pyrford has received consent to list their names in a representative client list. The listed clients do not approve or disapprove of Pyrford or its services.



## Country allocation does matter

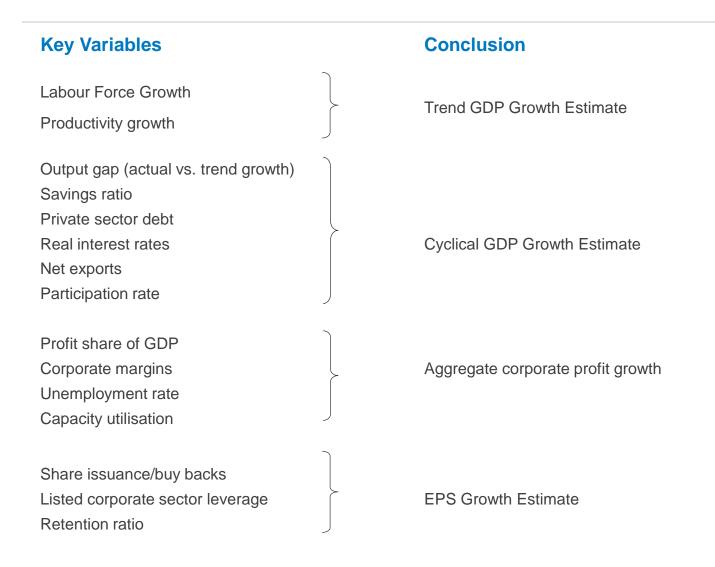
Compound Annual Returns in US\$, as at 31 December 2016. MSCI Indices (gross dividends reinvested)

	1 year	3 years	5 years	10 years
Asia Pacific ex-Japan (all countries)	7.06	0.10	4.98	3.94
Europe ex-UK	0.22	-2.63	6.88	0.96
UK	-0.04	-4.35	4.02	0.37
Japan	2.73	2.82	8.45	0.73
EAFE	1.51	-1.15	7.02	1.22
USA	11.61	8.63	14.57	7.01
Canada	25.49	-0.67	2.77	3.21
World	8.15	4.38	11.04	4.41
Emerging Markets	11.60	-2.19	1.64	2.17
All Countries World	8.48	3.69	9.96	4.12

Sources: Pyrford & MSCI

Past performance does not guarantee future results.

# Top down by country



Pyrford International | 27

# International Equity (EAFE) – country limits

As at 31 December 2016 (quarterly data)

Country	Maximum allocation %
Australia	22.6
Brazil	3.5
Denmark	14.1
Euro-area	60.9
Hong Kong	15.7
Indonesia	11.0
Israel	11.7
Japan	49.3
Malaysia	11.0
New Zealand	11.2
Norway	11.7
Philippines	16.0
Singapore	13.7
South Korea	11.0
Sweden	20.3
Switzerland	28.6
Taiwan	16.0
Thailand	16.0
United Kingdom	43.2

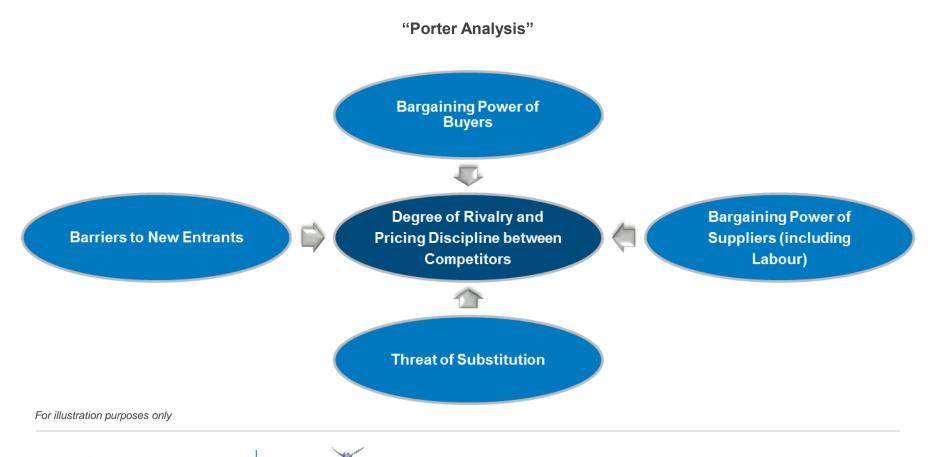
Source: Pyrford International

## Selecting the stocks for your portfolio

- Screening Which companies should be researched in depth?
  - Eliminate small companies and highly leveraged companies
  - Rank universe on basis of selected fundamentals (utilising a combination of dividend yield, return on equity and PE ratio)
- Stock sheets Scrutiny of the past assists in evaluating the future
  - In-house, from original sources
  - Discipline across the regions
  - Helps determine long-term sustainable growth rates:
    - > Disaggregation of return on equity Du Pont analysis
    - > Quality of earnings and balance sheet
  - 5 year earnings per share forecasts
- Company interviews Every company, every year
  - Must visit company prior to purchase and annually thereafter
  - Examine the business model and long-term strategy
  - Focus on visibility of earnings and sustainability of return on equity
- Peer review All buy and sell ideas are scrutinised by entire investment team

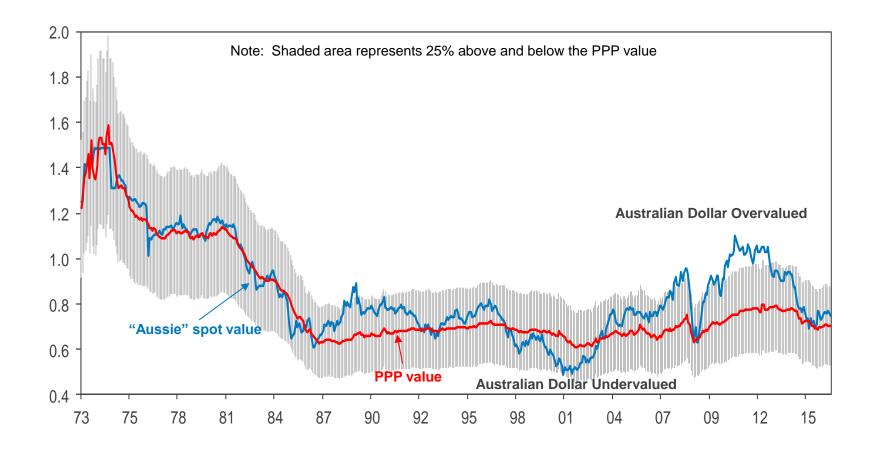
# Selecting stocks for your portfolio

- Emphasis on company visits and management interviews
- In-depth analysis of industry competitive framework and structural corporate competitive advantage
- Sustainability of ROE



# Sample of USD/AUD purchasing power parity analysis

As at 15 December 2016



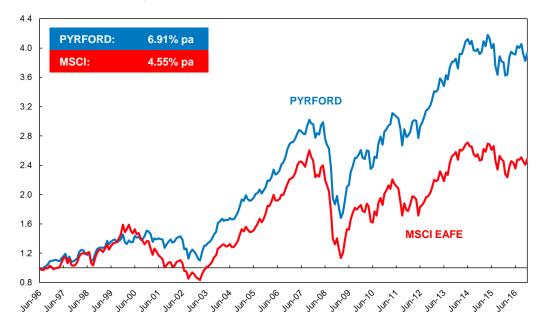
Source: Thomson Datastream/Pyrford International

# International Equity (EAFE) - investment performance

Over 20 years 6 months to 31 December 2016

- Excellent historical long-term returns
- Effective downside protection
  - Over 20 years 6 months to 31 December 2016 our client portfolios have fallen just 61c for every \$1 fall in the market
- Low historical absolute volatility

#### Long-term Growth of a Unit Value (US\$)



Sources: Pyrford & MSCI

Performance relates to the gross of fees Pyrford International Ltd 'International Equity (Base Currency US\$) composite' which comprises all fully discretionary, international equity accounts with a market value greater than US\$10m, a base currency of US\$ and no hedging restrictions. The date of inception is 1 July 1996. Past performance does not guarantee future results. Please see full GIPS compliant performance disclosure at the end of this document.



# International Equity (EAFE) - performance statistics

Over 20 years 6 months (01 July 1996 to 31 December 2016) USD - PSN quarterly data

	Pyrford
Downside Capture (%)	61.22
Upside Capture (%)	80.59
Beta*	0.74
R-Squared**	0.87
Standard Deviation***	15.11

Source: PSN Enterprise

\* A measure of the volatility of the portfolio relative to the market. A beta less than 1.0 identifies a portfolio that will move less than the market

\*\* The percentage of the portfolio's risk that is due to the market benchmark (systematic risk)

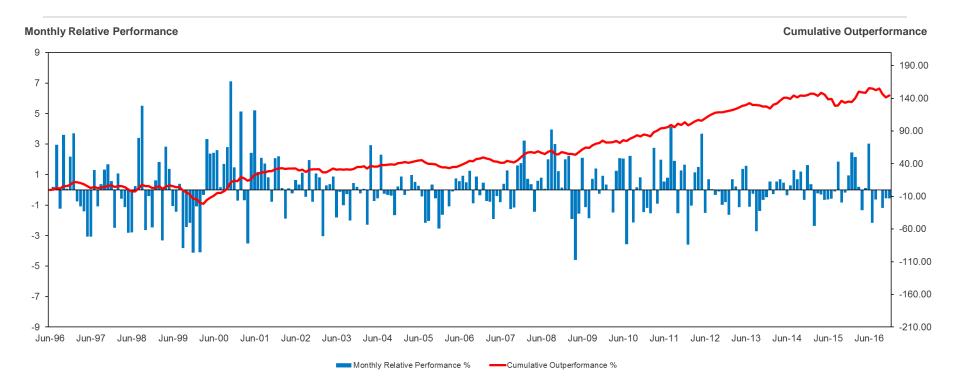
\*\*\* A statistical measure of dispersion of returns

Based on gross of fees quarterly composite returns from 01 July 1996 – 31 December 2016 against the MSCI EAFE Index.

Past performance does not guarantee future results.



# International Equity strategy - cumulative & rolling historical outperformance



#### % of Rolling Periods In Which Portfolio Outperformed – July 1996 to December 2016

	1M	1Qtr	1 Year	3 Year	5 Year	10 Year
Outperformed	53%	56%	54%	67%	85%	100%
Underperformed	47%	44%	46%	33%	15%	0%

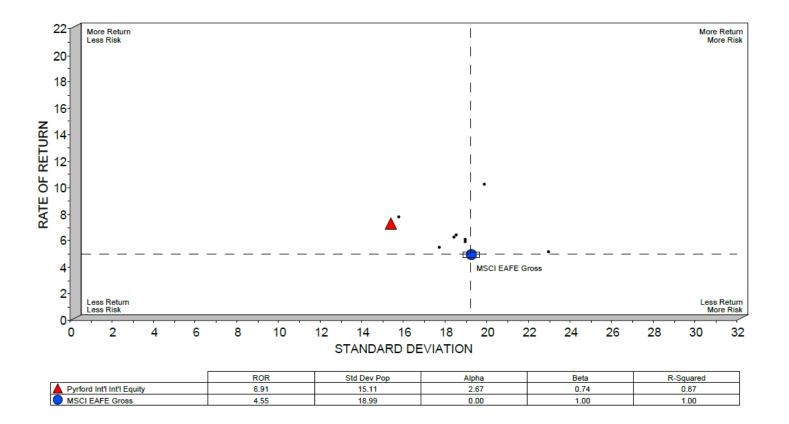
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This is supplementary information. Please see full GIPS compliant performance disclosure at the end of this document. Past performance does not guarantee future results.



## International Equity EAFE strategy - risk/reward

Since Inception (01 July 1996 to 31 December 2016). USD. PSN quarterly data.



Risk Benchmark used for this analysis: MSCI EAFE Gross

Source: PSN Enterprise by Informa Investment Solutions

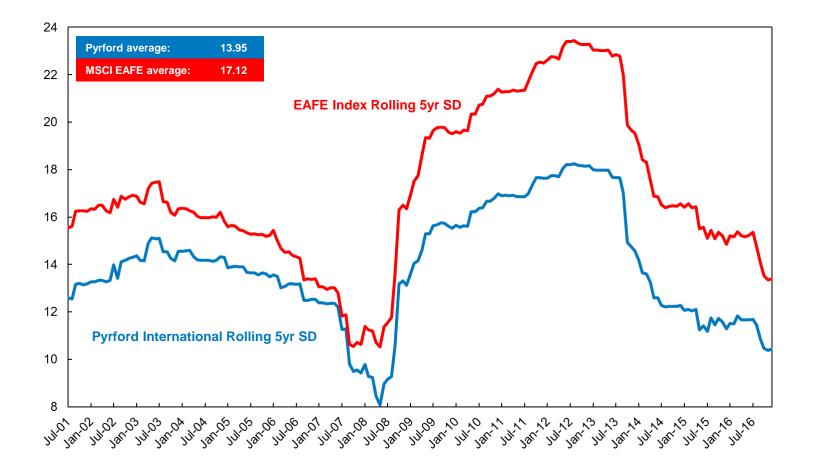
Based on gross of fees quarterly composite returns from the inception date of 01 July 1996 to 31 December 2016 against MSCI EAFE Index.

Please see full GIPS compliant performance disclosure at the end of this document. Past performance does not guarantee future results.



### International Equity EAFE strategy - rolling 5-year absolute volatility

As at 31 December 2016. USD.



Source: Pyrford International

Based on gross of fees monthly composite returns on a 5-year rolling basis from June 2001 to 31 December 2016 against MSCI EAFE Index Please see full GIPS compliant performance disclosure at the end of this document. **Past performance does not guarantee future results.** 



# Pyrford's current views

31 December 2016

- Trump's election victory has added further uncertainty to the direction of the US and world economy. Talk of immense stimulus expenditure has spooked bond markets but boosted equities in the US the major equity indices have hit new highs.
- Trump's 'promises' are vague and uncosted. World trade is already extremely weak and the threat of trade restrictions and/or fresh tariff impositions will do damage.
- 'Brexit' has added additional uncertainty.
- Many equity markets represent poor long-term value as central bank 'printing' has caused markets to re-rate without a commensurate improvement in fundamentals.
- Bond markets also offer poor fundamental value a consequence of the unorthodox practices of the major central banks. It is possible that a re-rating has now commenced.
- Excessive private and public debt levels, consequent deleveraging (in the household sector), deteriorating demographics and disappointing productivity have led to anaemic growth in developed countries. This looks set to continue.
- The fall in the oil price has negatives and positives. The biggest negative is the decline in capital investment relative to previously announced plans. The oil price is causing budgetary problems in the Middle East and for the first time several members of OPEC are seeking offshore funding.
- Eurozone economic problems remain unsolved. Debt levels in peripheral Europe and continued lack of competitiveness are unsustainable. Italian banks are in a parlous situation. Break-up of the eurozone, in some form, remains our preferred long-term solution.
- Asia ex-Japan offers the best absolute value and most attractive opportunities for growth. Demographics provide a favourable 'window' over the next 20 years.
- Money printing in Japan continues at extreme levels. The Bank of Japan Balance Sheet is now the equivalent of 80% of GDP. Five years ago it was 20%. Poor productivity growth and the most adverse demographics in the developed world provide severe headwinds.
- In general, markets are expensive. Low single-digit returns are probably the best that can be expected on a medium-term outlook.

This is not intended to serve as a complete analysis of every material fact regarding any company, industry or security. The opinions expressed here reflect our judgment at this date and are subject to change. Information has been obtained from sources we consider to be reliable, but we cannot guarantee the accuracy



#### Pyrford International Equity Trust <sup>1</sup> A commingled fund which is suitable for US based unit holders

Size	Management Fee <sup>2</sup>
First \$25m	0.70%
Next \$75m	0.60%
Next \$100m	0.50%
Thereafter	0.45%

<sup>1</sup> Minimum account size: US\$1 million

<sup>2</sup> Includes Custody Fees (State Street)

BMO Pyrford International Stock Fund		
	Class I <sup>4</sup>	Class R6 <sup>5</sup>
Total annual Fund operating expenses after fee waiver and expense reimbursement <sup>3</sup>	0.99%	0.84%

<sup>3</sup> BMO Asset Management Corp (Advisor) has agreed to waive or reduce its investment advisory fee and reimburse expenses to the extent necessary to prevent total annual operating expenses (excluding interest, taxes, brokerage commissions, other investment-related costs and extraordinary expenses, such at litigation and other expenses not incurred in the ordinary course of the Fund's business, and Acquired Fund Fees and Expenses) from exceeding 0.99% for Class I and 0.84% for Class R6 until 31 December 2017. This expense limitation agreement may not be terminated prior to 31 December 2017 without the consent of the Fund's Board of Directors, unless terminated due to the termination of the investment advisory agreement.

<sup>4</sup> Minimum account size: US\$1 million

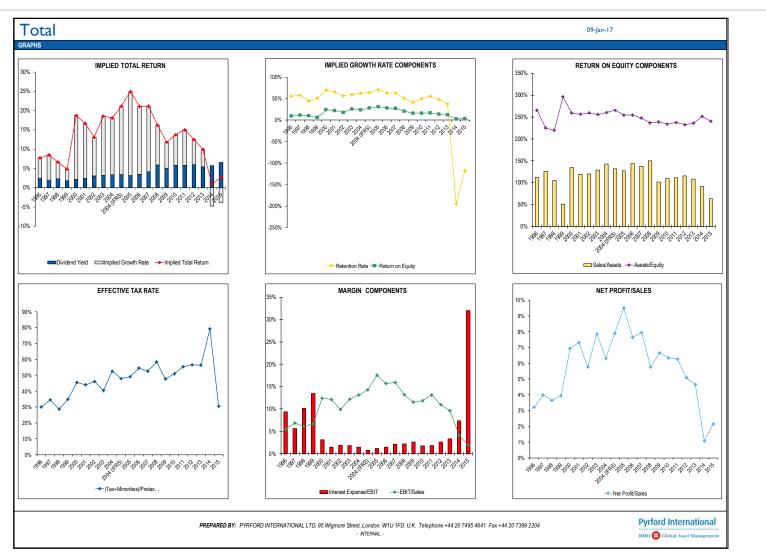
<sup>5</sup> Eligible retirement plans may open an account and purchase Class R6 shares by contacting BMO Funds US Services.



VALUE INDICATOR		STOCK INFORMA	ATION			Description o	f Operations:	5 YEAR EP	GROWTH FO	RECAST									
FORECAST DPS GROWTH RATE		MSCI Industry CI	lassification	ENERG'		with businesse	oil and gas company s in exploration,		Shareholder	ROE	Net Profit	Retention	Retained						
······································			Bloomberg	FP FP		operations. It is a	ing and marketing also active in speciality	NOW	s Funds		3,092	Ratio -118%	-3655						
CURRENT DIVIDEND YIELD : 5.0%			SEDOL	4905413	3	chemicals.		YEAR 1 YEAR 2	94222 92102	5.0% 6.0%	4,711 5,526	-45% -28%	-2120 -1547						
		Share price on (	)9/01/2017	49.0				YEAR 3 YEAR 4	90555 90555	8.0% 9.0%	7,244 8,150	0% 7%	0 570						
LONG TERM VALUE : 7.4%		Market Ca	apitalisation	112,917	,			YEAR 5	91125 COMPOUND EF	9.3%	8,464	10% 22.31%	846						
CONCLUSION									ear ROE assum	ptions	oneonor.	EL.OTH							
SONCLOSION New exploration fields and rising production profile will drive upstream pro all European oils and a solid 5 year production profile.	fitabilit	y over the next ten y	ears. Strong I	palance sheet and	sound man	agement. One of	best reserve profiles of	,	Sales/Assets let Profit/Sales Assets/Equity	90% 4.3% 240%									
CORPORATE GOVERNANCE																			
Auditors Current Ernest & Young/KPMG Audit Fees 40.4		Directors Tota Of which ind	al Number dependent	15 13		Officers Chairman	Patrick Pouyanne	lears in post 2	19	Age 53	Ratings	Moodys S&P	Aa3 A+						
Non-audit fees         6.7           Length of service         >10						CEO CFO Pa	Patrick Pouyanne trick de La Chevardiere	2	19 34	53 57									
	ding l	December 31st																	
€m to 2013, \$m from 2014)	1997	1998	<u>1999</u>	2000	<u>2001</u>	2002	2003	2004 (IFRS)	2005	2006	2007	2008	2009	<u>2010</u>	<u>2011</u>	<u>2012</u>	<u>2013</u>	<u>2014</u>	201
urnover 26,919 25	, <b>131</b> 985	24,333 21.643	42,178 37,139	114,557 95.485	105,318 87,760	102,540 86,622	104,652 86,905	116,842 95,390	137,607 108 431	153,802 124 617	158,752 128 026	179,976 150,534	131,327 109,521	159,269 131,963	184,693 152,897	200,061	189,542 162,320	212,018 183,644	143,42
EBITDA 2,543	146	2,690	5,039	19,072	17,558	15,918	17,747	21,452	29,176	29,185	30,726	29,442	21,806	27,306	31,796	31,387	27,222	28,374	20,44
Depreciation 1,054 1 Amortization 101	,153 131	1,201 105	2,235 110	4,859 303	4,781 319	5,792 212	4,977 139	4,762	5,007	5,055	5,425	5,755	6,682	8,421	7,506	9,525	9,031	19,656	17,72
EBIT (adjusted) 1,489 1 nterest Expense, net 140	, <b>993</b> 113	1,489 151	2,804 378	14,213 440	12,777 184	10,126 195	12,770 232	16,690 130	24,169 287	24,130 364	25,301 539	23,687 527	15,124 398	18,885 334	24,290 440	21,862 571	18,191 606	8,718 641	2,72 87
Other Income 54	73	98	122	800	1,141	1,026	1,233	1,139	1,747	2,028	1,775	1,721	1,940	1,988	2,105	2,069	2,566	2,807	2,58
Extraordinaries gains/(charges) 20 Pretax Income (Adjusted) 1.403 1	-11 .953	33 1.436	30 2.548	740 14.573	-283 13,734	-243 10.957	1,060 13,771	-380 17.699	790 25.629	-30 25,794	-573 26.537	-218 24.881	-286 16.666	496 20.539	699 25.955	547 23.360	-380 20,151	1,979 10.884	1,99 4,44
Tax & Minorities 421	673	412	888	6,626	6,040	5,047	5,547	8,467	12,566	14,056	13,929	14,509	7,933	10,464	14,378	13,213	11,331	8,620	1,35
	,160 <b>,280</b>	886 1,024	1,520 1,660	6,904 7,947	7,658 7,694	5,941 5,910	7,025 8,224	9,612 9,232	12,273 13,063	11,768 11,738	13,181 12,608	10,590 10,372	8,447 8,733	10,571 10,075	12,276 11,577	10,694 10,147	8,440 8,820	4,244 2,264	5,08 3,09
	,929 218	1,522 1,863	2,142 4,454	4,600 6.811	3,574 6.622	4,966 6,515	4,836 6.137	3,860 9,264	4,318 12.690	2,493 11,746	5,988 13.851	12,321 9.621	11,662 13.867	14,489 15.600	14,025 18,122	15,469 17.397	14,467 16.023	25,181 15.196	23,26 13,11
Receivables 3,640	563	3,122	7,466	14,307	13,497	13,087	12,357	14,025	19,612	17,393	19,129	15,287	15,719	18,159	20,049	19,206	16,984	15,704	10,62
	,322 .806	8,814 14,351	16,654 66.046	31,314 53.860	31,960 56,640	31,319 54.010	29,513 50,450	32,940 53.827	43,753 62.391	42,787 62.436	48,238 65,303	47,058 71,252	49,757 77,996	56,936 85.512	63,663 100,386	67,517 104,312	61,347 112,144	77,977 151.821	70,23 154,24
Total Assets 24,115 23	128	23,165	82,700	85,174	88,600	85,329	79,963	86,767	106,144	105,223	113,541	118,310	127,753	143,718	164,049	171,829	173,491	229,798	224,48
	232 .360	337 23.502	447 83,147	750 85.924	1,069 89,669	1,281 86,610	1,420 81,383	1,728 88,495	1,728 107,872	1,728 106,951	1,728 115,269	1,728 120.038	1,728 129,481	1,728 145,446	1,728 165,777	1,728 173,557	1,728 175,219	1,728 231,526	1,72 226,21
Debt due within one year 5,916 4	,008	4,096	8,360	15,267	16,035	14,946	12,805	14,762	16,989	18,367	17,419	19,354	18,902	21,642	24,449	25,714	21,937	10,942	12,48
	,794 ,802	2,348 6,444	5,271 13,631	9,882 25,149	10,034 26,069	10,236 25,182	10,304 23,109	11,672 26,777	16,406 33,428	15,080 33,522	18,183 35,662	14,815 34,327	15,383 34,408	18,450 40,251	22,086 46,702	21,648 49,019	21,958 44,797	24,150 53,673	20,92 50,97
Current liabilities 8.645 F	752	5,151	7,954	20,110	20,613	20,410	19,945	21,170	24,257	23,414	24,246	26,060	30,858	32,052	35,698	35,832	37,770	63,026	61,96
Long term debt 3,235 4	,887 158	-448 10.346	-1,525 27.669	3,819 32,401	1,515 33,932	-2,388 32,146	45 30.406	-54 31.608	-1,927 40.645	-3,716 40.321	-566 44.858	-4,446 48,992	-2,398 52,552	-3,058 60,414	-199 68.037	-2,525 72,912	-1,555 72,629	-13,412 90,330	-3,56 92,49
Long term debt 3,235 4 Net debt repayments/(Issuance) -830		10,683	28,116	33,151	35,001	33,427	31,826	33,336	42,373	42,049	46,586	50,720	54,280	62,142	69,765	74,640	74,357	92,058	94,22
Long term debt         3,235         4           Vet debt repayments/[Issuance)         -830         1           Shareholders' Funds         9,034         10           Shareholders' Funds         9,135         10	,390			678	1,830 3,864	3,161 6,158	2,771 5,899	2,755 7,777	3,373 8,848	2,341 9,910	1,525 10,549	1,641 11,861	1,883 11,849	1,931 13,812	2,294 17,950	2,745 19.905	2,188 22,400	3,799 30,509	2,84 28,03
Long term debt         3,235         4           Vet debt repayments/(issuance)         -830         1           Shareholders' Funds (adjusted)         9,034         10           Pension Fund Deficit/(Surplus)         9,135         10	,390	2 533	617 3.526							5,510	10,345	97	63	80	111	112	22,400	57	20,03
ong term debt         3,235         4           let debt regarmentsi(Issuance)         -830         1           hareholders Funds         9,034         10           ihareholders Funds (adjusted)         9,135         10           vension Fund Deficit/(Surplus)         tet Capex         1,900         2		2,533 13	617 3,526 18	4,905 28	3,004	25	29	38	55	00						112			
.ong term debt 3,235 4 tel debt repayments/(issuance) 8,330 1 shareholders Funds (adjusted) 9,135 10 ension Fund Defucil(Surplus) tel Capex 1,900 21 Verage Brent OII Price (USSIb) 21 hares outstanding m 243.21 24	, <b>390</b> ,705 19 5.90	13 245.90	3,526 18 732.29	4,905 28 740.47	22 705.93	25 687.19	29 649.12	2,428.5	2,362.8	2,312.3	2,274.4	2,246.7	2,237.3	2,244.5	2,257.0	2,266.6	2,271.5	2,281.0	2,304.
.ong term debt 3,225 4 de debt regsyments/[(susunce) 8,33 0 shareholders Funds (adjusted) 9,135 10 ension Fund Defuct/[Surptus) 1,900 2 tet Capex 1,900 21 Shares outstanding m 243.21 24 EPS (regorated) € 3,58 EPS (adjusted) € 4,04	, <b>390</b> ,705 19	13	3,526 18	4,905 28	22	25	29			00	2,274.4 5.37 <b>5.54</b>	2,246.7 4.71 <b>4.62</b>	2,237.3 3.78 <b>3.90</b>	2,244.5 4.71 <b>4.49</b>	2,257.0 5.44 5.13				2,304. 2.1 <b>1.3</b>
Long term debt         3,235         4           Vet debt repayments/(issuance)         -833         1           Shareholders Funds (adjusted)         9,034         10           Shareholders Funds (adjusted)         9,135         10           Vet Capex         1,900         2           Vet Capex         1,900         2           Shareholders Find Di Price (USSb)         21         2           PS (argorted)         €         3,58           EPS (argoitsed)         €         4,04           PS         €         1,60	,390 ,705 19 5.90 4.73	13 245.90 3.61	3,526 18 732.29 4.77	4,905 28 740.47 10.80	22 705.93 10.85	25 687.19 9.40	29 649.12 11.56	2,428.5 3.76	2,362.8 5.08	2,312.3 5.44	5.37	4.71	3.78	4.71	5.44	2,266.6 4.72	2,271.5 3.72	2,281.0 1.86	2.1

Total																						09-Jan-
RATIO ANALYSIS	2																			1		
VALUATION :	PE ratio Price to Book Value Dividend Yield	1996 18.0 1.7 2.5%	1997 21.1 2.4 2.0%	1998 20.7 2.1 2.3%	1999 58.5 3.5 1.8%	2000 14.7 3.6 2.1%	2001 14.7 3.3 2.4%	2002 15.5 2.8 3.1%	2003 11.6 3.1 3.2%	2004 13.2 3.3 3.4%	2004 (IFRS) 10.4 3.0 3.4%	2005 9.5 3.0 3.1%	2006 10.8 3.1 3.4%	2007 9.0 2.5 4.1%	2008 8.4 1.8 5.9%	2009 11.5 1.9 5.1%	2010 8.8 1.5 5.8%	2011 7.7 1.3 5.8%	2012 8.7 1.2 6.0%	2013 11.5 1.4 5.4%	2014 51.8 1.3 5.7%	2015 33.4 1.1 6.5%
LEVERAGE :	Long term Debt/Equity Total Debt/Total Assets Net Debt/Net Debt + Equity	35.8% 37.8% 31.9%	46.8% 37.5% 39.7%	49.8% 39.3% 42.0%	28.3% 20.4% 33.5%	60.7% 42.0% 48.1%	58.9% 42.9% 48.6%	61.1% 44.5% 47.6%	65.6% 43.6% 47.9%	63.3% 43.2% 49.4%	67.0% 43.7% 50.4%	59.7% 41.4% 47.6%	58.1% 41.3% 49.4%	54.1% 37.5% 44.3%	53.2% 39.2% 40.3%	58.7% 39.9% 42.0%	53.1% 38.2% 39.4%	52.5% 37.7% 40.4%	49.1% 37.0% 38.7%	52 0% 35.3% 38.4%	69.8% 33.6% 35.1%	67.0% 34.2% 35.6%
LIQUIDITY :	Quick Ratio	1.1	1.0	1.1	0.9	1.0	1.0	1.0	1.0	0.9	0.9	0.9	0.9	1.0	1.1	1.0	1.0	1.0	1.0	1.0	1.2	1.1
OVERAGE :	Cash Flow Interest Cover	18.2	27.8	17.8	13.3	43.3	95.4	81.6	76.5	92.1	165.0	101.7	80.2	57.0	55.9	54.8	81.8	72.3	55.0	44.9	44.3	23.4
MARGINS :	EBITDA Operating Pretax Net	9.4% 5.5% 5.2% 3.2%	10.8% 6.8% 6.7% 4.0%	11.1% 6.1% 5.9% 4.2%	11.9% 6.6% 6.0% 3.9%	16.6% 12.4% 12.7% 6.9%	16.7% 12.1% 13.0% 7.3%	15.5% 9.9% 10.7% 5.8%	17.0% 12.2% 13.2% 7.9%	17.6% 13.1% 13.3% 6.3%	18.4% 14.3% 15.1% 7.9%	21.2% 17.6% 18.6% 9.5%	19.0% 15.7% 16.8% 7.6%	19.4% 15.9% 16.7% 7.9%	16.4% 13.2% 13.8% 5.8%	16.6% 11.5% 12.7% 6.6%	17.1% 11.9% 12.9% 6.3%	17.2% 13.2% 14.1% 6.3%	15.7% 10.9% 11.7% 5.1%	14.4% 9.6% 10.6% 4.7%	13.4% 4.1% 5.1% 1.1%	14.3% 1.9% 3.1% 2.2%
GROWTH :	Payout Ratio EPS Growth Rate DPS Growth Rate	44.7%	41.9% 31.9% 23.8%	55.4% -23.5% 0.9%	49.3% 32.0% 17.5%	30.6% 126.4% 40.4%	35.0% 0.5% 15.2%	43.6% -13.4% 7.9%	40.7% 23.0% 14.6%	37.4% 24.8% 14.9%	35.9% -73.9% -75.0%	29.3% -64.8% -70.0%	36.8% 44.7% 38.5%	37.3% 5.7% 27.8%	49.4% -13.4% 21.9%	58.4% -29.6% 10.1%	50.8% 0.0% 0.0%	44.4% 43.9% 0.0%	52.3% 0.2% 2.6%	62.3% -31.6% 6.1%	295.0% -60.6% 25.1%	218.2% -41.9% 21.0%
DU PONT ANALYSIS																		1000				
MPLIED TOTAL RETURN :	Dividend Yield Implied Growth Rate Implied Total Return	2 5% 5 2% 7 7%	2.0% 6.5% 8.5%	2.3% 4.3% 6.6%	1.8% 3.0% 4.8%	2.1% 16.6% 18.7%	2.4% 14.3% 16.7%	3.1% 10.0% 13.1%	3.2% 15.3% 18.5%	3.4% 14.7% 18.1%	3.4% 17.8% 21.2%	3.1% 21.8% 24.9%	3.4% 17.6% 21.1%	4.1% 17.0% 21.1%	5.9% 10.4% 16.2%	5.1% 6.7% 11.8%	5.8% 8.0% 13.7%	5.8% 9.2% 15.0%	6.0% 6.5% 12.5%	5.4% 4.5% 9.9%	5.7% -4.8% 0.9%	6.5% -3.9% 2.7%
GROWTH RATE COMPONENT	S: Retention Rate 5yr average Retention Rate	55.3% 11.1%	58.1% 22.7%	44.6% 31.6%	50.7% 41.8%	69.4% 55.6%	65.0% 57.6%	56.4% 57.2%	59.3% 60.2%	62.6% 62.5%	64.1% 61.5%	70.7% 62.6%	63.2% 64.0%	62.7% 64.6%	50.6% 62.2%	41.6% 57.7%	49.2% 53.4%	55.6% 51.9%	47.7% 48.9%	37.7% 46.3%	-195.0% -1.0%	-118.2% -34.5%
	Return on Equity 5yr average ROE Return on Assets 5yr average ROA	9.4% 1.9% 3.6% 0.7%	11.2% 4.1% 5.0% 1.7%	9.6% 6.0% 4.4% 2.6%	5.9% 7.2% 2.0% 3.0%	24.0% 12.0% 9.2% 4.8%	22.0% 14.5% 8.6% 5.8%	17.7% 15.8% 6.8% 6.2%	25.8% 19.1% 10.1% 7.4%	23.5% 22.6% 9.0% 8.8%	27.7% 23.3% 10.4% 9.0%	30.8% 25.1% 12.1% 9.7%	27.9% 27.2% 11.0% 10.5%	27.1% 27.4% 10.9% 10.7%	20.4% 26.8% 8.6% 10.6%	16.1% 24.5% 6.7% 9.9%	16.2% 21.5% 6.9% 8.8%	16.6% 19.3% 7.0% 8.0%	13.6% 16.6% 5.8% 7.0%	11.9% 14.9% 5.0% 6.3%	2.5% 12.1% 1.0% 5.2%	3,3% 9.6% 1.4% 4.0%
RETURN ON EQUITY COMPON	CONTRACTOR AND A DESCRIPTION OF A DESCRIPTION OF A DESCRIPTION OF A DESCRI	111.6% 3.2% 265.1%	126.0% 4.0% 224.8%	105.0% 3.6% 220.0%	51.0% 3.9% 295.7%	134.5% 6.9% 259.2%	118.9% 7.3% 256.2%	120.2% 5.8% 259.1%	128.59% 7.86% 255.71%	142.86% 6.31% 260.36%	132.03% 7.90% 265.46%	127.57% 9.49% 254.58%	143.81% 7.63% 254.35%	137.72% 7.94% 247.43%	149.93% 5.76% 236.67%	101.43% 6.65% 238.54%	109.50% 6.33% 234.05%	111.41% 6.27% 237.62%	115.27% 5.07% 232.53%	108.17% 4.65% 235.65%	91.57% 1.07% 251.50%	63.40% 2.16% 240.08%
MARGIN COMPONENTS :	EBIT/Sales PBT/EBIT (Interest Burden) NP/PBT (Tax Burden)	5.53% 94.2% 70.0%	6.84% 98.0% 65.5%	6.12% 96.4% 71.3%	6.65% 90.9% 65.1%	12 41% 102 5% 54 5%	12.13% 107.5% 56.0%	9.88% 108.2% 53.9%	12.20% 107.8% 59.7%	13.09% 101.6% 47.5%	14.28% 106.0% 52.2%	17.56% 106.0% 51.0%	15.69% 106.9% 45.5%	15.94% 104.9% 47.5%	13.16% 105.0% 41.7%	11.52% 110.2% 52.4%	11.86% 108.8% 49.1%	13.15% 106.9% 44.6%	10.93% 106.9% 43.4%	9.60% 110.8% 43.8%	4.11% 124.8% 20.8%	1.90% 162.9% 69.6%
ROE CHANGE BREAKDOWN	Contribution from																					
	Asset Turnover Margins Margin(EBIT) Interest Burden Tax Leverage CHECK Leverage CHECK Total		1.21% 2.23% 2.48% 0.50% -0.75% -1.71% -1.76% 1.68%	-1.13% -0.24% -0.38% -0.10% 0.25% -0.21% 0.43% -0.94%	-5.91% -0.04% -0.08% -0.01% 0.05% 2.27% 1.61% -4.34%	12.28% 7.41% 8.18% 1.60% -2.37% -1.61% -2.16% 17.52%	-2.89% 1.18% -0.51% 1.07% 0.61% -0.27% -0.30% -2.02%	0.22% -4.75% -4.12% 0.13% -0.76% 0.23% 0.23% -4.30%	1.61% 6.84% 4.66% -0.08% 2.25% -0.29% -0.16% 8.29%	2.61% -5.42% 1.75% -1.47% -5.70% 0.45% 0.44% -2.36%	-2.03% 5.74% 2.23% 1.09% 2.41% 0.50% 0.50% 4.21%	-1.01% 5.37% 6.05% 0.00% -0.68% -1.23% 3.14%	3.54% -6.43% -3.32% 0.24% -3.34% -0.03% -0.03% -2.91%	-1.19% 1.10% 0.43% -0.52% 1.19% -0.76% -0.76% -0.85%	2.03% -7.58% -4.52% 0.04% -3.09% -1.07% -1.05% -6.60%	-7.16% 2.65% -2.49% 0.89% 4.25% 0.15% 0.14% -4.36%	1.24% -0.81% 0.47% -0.21% -1.07% -0.31% 0.12%	0.28% -0.15% 1.70% -0.29% -1.56% 0.25% 0.25% 0.38%	0.52% -3.19% -2.79% 0.00% -0.40% -0.33% -0.33% -3.00%	-0.81% -1.09% -1.65% 0.46% 0.10% 0.17% 0.17% -1.73%	-1.13% -8.70% -4.95% 0.86% -4.61% 0.43% 0.48% -9.36%	-1.11% 2.08% -2.94% 0.79% 4.23% -0.15% -0.13% 0.84%
MARGIN COMPONENTS :	Absolute change in ROE EBIT/Sales Interest Expense/EBIT	5.5% 9.4%	1.74% 6.8% 5.7%	-1.58% 6.1% 10.1%	-3.68% 6.6% 13.5%	18.07% 12.4% 3.1%	-1.99% 12.1% 1.4%	- <b>4.30%</b> 9.9% 1.9%	8.16% 12.20% 1.82%	-2.36% 13.09% 1.46%	4.21% 14.28% 0.78%	3.13% 17.56% 1.19%	-2.91% 15.69% 1.51%	-0.85% 15.94% 2.13%	-6.61% 13.16% 2.22%	-4.36% 11.52% 2.63%	0.12% 11.86% 1.77%	0.38% 13.15% 1.81%	-3.00% 10.93% 2.61%	-1.73% 9.60% 3.33%	-9.40% 4.11% 7.35%	0.82% 1.90% 32.00%
SECTOR BREAKDOWN	(Tax+Minorities)/Pretax Profit	30.0%	34.5%	28.7%	34.9%	45.5%	44.0%	46.1%	40.28%	52.54%	47.84%	49.03%	54.49%	52.49%	58.31%	47.60%	50.95%	55.40%	56.56%	56.23%	79.20%	30.42%
SECTOR BREAKDOWN	2004	2005		2006	1	2007	- 1	2008	3	200	a l	2010	)	2011		2012*		201	3*	2014		2015*
Upstream Downstream Chemicals	Sales         Op. Margin           30%         35%           68%         4%           17%         5%	Sales ( 34% 71% 15%	Op. Margin 46% 6% 1%	Sales         Op           31%         74%           15%         15%	Margin 49% 3% 5%	Sales         O           30%         75%           15%         15%	Dp. Margin 48% 5% 7%	Sales 31% 76% 13%	Op. Margin 47.5% 0.7% -0.3%	Sales 28.6% 75.9% 13.8%	Op. Margin 40.1% 2.6% 3.6%	Sales 29.2% 77.7% 13.1%	Op. Margin 42.5% 0.9% 5.2%	Sales 30.4% 77.9% 12.4%	Op. Margin 44.5% 1.0% 3.4%	Sales ( 29.4% N/A N/A	Dp. Margin 37.9% N/A N/A	Sales 28.1% N/A N/A	Op. Margin 37.0% N/A N/A	Sales 24.8% N/A N/A	Dp. Margin 19.9% N/A N/A	Sales         Op. Ma           24.2%         -8.5%           N/A         N/A           N/A         N/A
Corporate/Intercompany	-14%	-21%		-22%		-20%		-20%		-18.3%		-20.1%		-20.7%		N/A		N/A REPORTING STR HANGED	N/A UCTURE	N/A	N/A	N/A N/A
			PRE	PARED BY: PYRF	ORD INTERNA	ATIONAL LTD,	95 Wigmore Str	eet, London. W - INTERNAL -	11U 1FD. U.K.	Telephone +44	0 7495 4641 F	ax +44 20 7399	2204									International abal Asset Managemen

	RNINGS																			
		<u>1997</u>	<u>1998</u>	<u>1999</u>	2000	<u>2001</u>	2002	2003	<u>2004</u>	2005	2006	<u>2007</u>	2008	2009	<u>2010</u>	<u>2011</u>	<u>2012</u>	<u>2013</u>	<u>2014</u>	
EE CASH FLOW		1,280	1,024	1,660	7,947	7,694	5,910	8,224	7,746	13,063	11,738	12,608	10,372	8,733	10,075	11,577	10,147	8,820	2,264	
	Depreciation Change in Working Capital	1,153 -213	1,201 -350	2,235 4,012	4,859 4,587	4,781 -1,151	5,792 -719	4,977 -1,176	5,498 1,216	5,007 6,490	5,055 2,442	5,425 -1,099	5,755 -3,966	6,682 -594	8,421 5,216	7,506 1,882	9,525 -354	9,031 -5,036	19,656 -8,205	
	Capital expenditure Cash Flow Before Financing	2,705 -60	2,533 42	3,526 -3,643	4,905 3,314	3,864 9,762	6,158 6,263	5,899 8,478	7,247 4,781	8,848 2,732	9,910 4,441	10,549 8,583	11,861 8,232	11,849 4,160	13,812 -532	17,950 -749	19,905 121	22,400 487	30,509 -384	
Cash Co	onversion of Earnings (FCF)/ Net Income	-4.7%	4.1%	-219.5%	41.7%	126.9%	106.0%	103.1%	61.7%	20.9%	37.8%	68.1%	79.4%	47.6%	-5.3%	-6.5%	1.2%	5.5%	-17.0%	
	Dividends Paid Net Debt Repayments	1,887	-448	-1,525	3,819	1,515	-2,388	45	-54	-1,927	-3,716	-566	-4,446	5,086 -2,398	5,098 -3,058	5,140 -199	5,184 -2,525	5,367 -1,555	7,308 -13,412	
	Cash Flow Post Financing Cash Flow Post Financing/ Net Income	-1,947 -152.1%	490 47.9%	-2,118 -127.6%	-505 -6.4%	8,247 107.2%	8,651 146.4%	8,433 102.5%	4,835 62.4%	4,659 35.7%	8,157 69.5%	9,149 72.6%	12,678 122.2%	6,558 75.1%	2,526 25.1%	-550 -4.8%	2,646 26.1%	2,042 23.2%	13,028 575.4%	
	Capex/Depreciation	234.6%	210.9%	157.8%	100.9%	80.8%	106.3%	118.5%	131.8%	176.7%	196.0%	194.5%	206.1%	177.3%	164.0%	239.1%	209.0%		155.2%	
	Receivables/Sales Inventory/Sales	12.2% 7.6%	12.8% 7.7%	17.7% 10.6%	12.5% 5.9%	12.8% 6.3%	12.8% 6.4%	11.8% 5.9%	11.4% 5.7%	14.3% 9.2%	11.3% 7.6%	12.0% 8.7%	8.5% 5.3%	12.0% 10.6%	11.4% 9.8%	10.9% 9.8%	9.6% 8.7%	9.0% 8.5%	7.4% 7.2%	
) Tota	al and PetroFina merged to form TotalFina																			
9 Tota 0 Tota 0 Extr 1/2 Extr 3 Extr to in 4 Extr furth 4 San	al and PetroFina merged to form TotalFina aliFina and Eli Acquitaine merged to form TotalFinaEli rardnary (ass mainly relates to restructuring costs ar raordinary (ass of €1 the was largely due to sajmficant raordinary loss of €1 the was largely due to early reti rwestgations of EU Commission nito alleged articorry raordinary gain of €2.174bn due largely to asset disp her release of contingency reserves of €150m for the not-Synthelabo bought Avents to form Sanof-Avents	Id early retirement plans foll sale of assets. rement/restructuring plans a bettive practices involving c boals which were partly cou Toulouse-AZF plant explose	and litigation rese ertain products s interacted by resi sion.	erves of €245m, old by Arkema. tructuring costs o	of€165m and															
9 Tota 0 Tota 1/2 Extr 3 Extr 4 Extr 4 San 12.6 4 Arke 5 Lau 6 Arke	al and PetroFina merged to form TotalFina alFina and Elf Acquitaine merged to form TotalFinaElf araordinary loss mainly relates to restructuring costs ar raordinary loss of 11 howas largely due to ealy refi- newstgatons of EU Commission into alleged anticom raordinary goar of 21 r14ho ute largely to ased refi- her release of contingency reserves of €150m for the not-Syntheiabo bought Avents to form Sanoh-Avents. 65% of the stock whet the increase in capital ema formed on October 1 2004. Regrouped chloroci unch of Yemen LNG and acquisition of Deer Creek in ema spun-off bloiwing shareholder.	Id early retirement plans foil sale of assets. ement/restructuring plans a vettive practices involving o usals which were partly cou Toulouse-AZF plant explos The TOTAL stake in the co hemicals (formerly part of th Canada.	and litigation rese ertain products s interacted by resi sion. ombined compar	erves of €245m, iold by Arkema. tructuring costs ( ny was almost ha	of €165m and alved to	tes and perform	ance polymers.													
00         Tote           00         Extr           01/2         Extr           03         Extr           04         Extr           04         Extr           04         Extr           04         Extr           04         Extr           04         Extr           05         Lau           06         Arke           05         Lau           06         Arke           06         Arke           07         Patr           90         Patr	al and PetroFina merged to form TotalFina aliFina and El Acquitaine merged to form TotalFinaEl araordinary loss manity relates to restructuring costs ar araordinary alion to both yeans targely due to significant reaordinary alion to both yeans targely due to significant reaordinary alion 24 21 /Tah due langely to asset dispa- her release of contingency reserves of E150m for the non-Symthetab coupth Avents to form Sanof-Avents. 65% of the stock atter the increase in capital ema tomed on October 1,2004. Regrouped chloroct anch of Verene LING and acquisation of Deer Creek no. -1 stock spite feactive May 18, 2006. threship agreement with GDF Suez and Areva for the ned 3 ol and gas agreements in LBya mick de La Chevardiere succeded Robert Castagipen	de early reterement plans foil sale of assets. ement/restructuring plans is bettive practices involving o saals which were partly cou- toulouse-AZE plant explos The TOTAL stake in the co- hemicals (formerly part of th Canada. 12 2006. development of a nuclear	and litigation rese ertain products s interacted by resi sion. ombined compar te base chemical	erves of €245m, sold by Arkema. tructuring costs of ny was almost ha	of €165m and alved to	tes and perform	ance polymers.													
9         Tote           00         Tote           00         Extr           11/2         Extr           13         Extr           14         Extr           14         San           15         Lau           16         Arko           16         Arko           16         Arko           16         Patr           Sign         Patr           2         Lau	al and PetroFina merged to form TotalFina aliFina and Elf Acquitaine merged to form TotalFinaElf raordinary loss mainly relates to restructuring costs ar raordinary loss of 11 bin was largely due to early ret mestgations of EU Commission rinto alleged anticomp raordinary loss of e11 bin was largely due to early ret metrelates of contingency reserves of E10bin of the relates of contingency reserves of E10bin of the role Synthelabo bought Avenits to form Sanot-Aventis 65% of the stock whet the increase in capital rema formed on October 1,2004. Regrouped chlorod unch of Yemen LNG and acquisition of Deer Creek in terma spun-of Bloiving shareholder meeting on May or.1 stock spit, effective May 18, 2006 therschip agreement with GDF Suez and Areva for the ned 3 of and gas greements in LBya	de early reterement plans foll sale of assets. ement/restructuring plans a bettive practices involving o sale which were partly cou- toulouse-AZF plant explos The TOTAL stake in the co hemicals (formerly part of th Canada. 12 2006. development of a nuclear as CFO in June.	and litigation rese ertain products s interacted by resi sion. mbined compar- te base chemical power plant in the	erves of €245m, kold by Arkema. Irructuring costs of ny was almost ha Is & polymers se e UAE.	of €165m and alved to ector), intermedia	·	ance polymers.													
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# International Equity Composite US\$ - Disclosures

	Gross-of-fees		Benchmark	Composite	Benchmark	Number of	Composite	Total Firm	% of Total	Returns %					
Calendar Year	Composite Return for the Period %	Composite Return for the Period %	MSCI EAFE Return %	3-Yr Ann. Std Dev (%)	3-Yr Ann. Std Dev (%)	Accounts at period end	Assets at period end (US\$ m)	Assets at period end (US\$ m)	% of Total Firm Assets	Dispersion (Range) (%)	High	Low	Median		
1996 H2	9.8	9.4	1.6	-	-	1	71	868	8.2	-	-	-	-		
1997	0.8	0.1	2.1	-	-	1	71	1,162	6.1	-	-	-	-		
1998	15.2	14.4	20.3	-	-	1	82	1,143	7.2	-	-	-	-		
1999	14.2	13.4	27.2	13.1	15.9	1	151	1,229	12.3	-	-	-	-		
2000	3.7	3.0	(14.0)	12.9	15.7	1	22	843	2.6	-	-	-	-		
2001	(7.8)	(8.5)	(21.2)	12.1	15.2	1	20	1,187	1.7	-	-	-	-		
2002	(12.0)	(12.6)	(15.7)	14.8	16.0	5	152	1,328	11.4	-	-	-	-		
2003	31.9	31.0	39.2	16.3	17.8	7	387	2,133	18.1	0.19	32.9	31.1	31.6		
2004	19.7	18.9	20.7	14.9	15.5	7	354	2,697	13.1	0.12	20.1	18.9	19.8		
2005	8.6	7.8	14.0	10.8	11.4	7	514	2,610	19.7	0.21	9.4	7.9	8.9		
2006	28.0	27.1	26.9	7.4	9.3	6	555	3,076	18.0	0.23	28.3	27.8	28.0		
2007	10.1	9.4	11.6	7.1	9.4	5	385	2,992	12.9	0.33	10.4	9.4	10.0		
2008	(32.9)	(33.4)	(43.1)	15.7	19.3	4	170	2,009	8.5	0.58	(31.7)	(33.4)	(32.6)		
2009	31.6	30.6	32.5	18.8	23.6	4	208	2,583	8.1	0.40	32.1	31.2	31.5		
2010	9.5	8.8	8.2	21.0	26.3	5	269	3,123	8.6	0.29	9.9	9.2	9.6		
2011	(1.7)	(2.4)	(11.7)	17.1	22.5	9	476	3,510	13.6	0.64	(0.5)	(2.4)	(1.4)		
2012	17.2	16.4	17.9	14.3	19.3	11	1,046	7,263	14.4	0.40	18.0	16.9	17.3		
2013	17.2	16.3	23.3	11.4	16.2	12	2,451	11,446	21.4	0.63	17.9	15.7	17.4		
2014	1.6	0.9	(4.5)	9.4	13.0	13	3,443	12,706	27.1	0.38	2.7	1.4	1.8		
2015	(2.8)	(3.5)	(0.4)	10.2	12.5	12	3,617	11,073	32.7	0.16	(2.2)	(3.1)	(2.7)		
2016	3.4	2.7	1.5	10.6	12.5	8	1,941	9,670	20.1	0.40	4.2	2.9	3.4		

Past performance does not guarantee future results

### Disclosure

Pyrford International Ltd claims compliance with the Global Investment Performance Standards (GIPS®) and has prepared and presented this report in compliance with the GIPS standards. Pyrford International Ltd has been independently verified for the period January 1, 1994 to September 30, 2016 by Grant Thornton UK LLP. The verification report is available upon request.

Verification assesses whether (1) the firm has complied with all the composite construction requirements of the GIPS standards on a firm-wide basis and (2) the firm's policies and procedures are designed to calculate and present performance in compliance with the GIPS standards. Verification does not ensure the accuracy of any specific composite presentation.

#### Notes to the performance presentation

Pyrford International, a wholly owned subsidiary of the Bank of Montreal, is an investment management firm based in the United Kingdom providing international asset management services for its clients. Pyrford is part of BMO's Wealth Management group which provides wealth management services in North America and the markets in which Pyrford additionally operates: Middle East, UK, Australia and Europe. As at December 31, 2016 Pyrford International Ltd had total assets under management and administration and term investments of US\$9,670m. For the purpose of measuring and presenting investment performance, all discretionary fee paying accounts of Pyrford International Ltd are allocated to a composite and a complete list and description of the composites is available on request. Additional information regarding the firm's policies and procedures for calculating and reporting performance returns is available upon request.

The Pyrford International Ltd "International Equity (Base Currency US\$) composite" comprises all fully discretionary, international equity accounts with a market value greater than US\$10m, a base currency of US\$ and no hedging restrictions. The benchmark for the composite is the MSCI EAFE index. The composite was first created on July 1, 1996. On April 1, 2002 the composite construction criteria were redefined to allow the inclusion of pooled funds, taxable funds and funds of between US\$10 – 15 million on the basis that these do not materially impact the returns generated.

All returns are calculated in US\$ terms on a time-weighted basis based on monthly valuations using modified Dietz. Composites have been asset weighted, where applicable, using the beginning of month market value adjusted for day weighted net inflows.

Where there are more than four accounts in the composite over a full year, dispersion is measured as the asset weighted standard deviation of asset weighted portfolio returns of all accounts in the composite for the full year.

The three-year annualised standard deviation measures the variability of the composite returns over the preceding 36-month period.

The accounts in this composite are unleveraged and derivatives are used solely for currency hedging purposes.

As at December 31, 2016, 7.0% of the composite assets were invested in Malaysia, Thailand and Taiwan which are not included in the MSCI EAFE Index. Historically the composite has invested between 2.4% and 13.0% in these countries.

Performance results are presented gross of management and custodial fees, but net of transaction costs and before taxes (except for non-reclaimable withholding tax). The standard management fee schedule for segregated management is as follows: 0.70% per annum on the first US\$50 million; 0.50% on the next US\$50 million, and thereafter 0.35% per annum.

Net-of-fees performance has been calculated using the highest management fee of 0.70% per annum, as described in the firm's fee schedule shown above.

Returns will be reduced by advisory fees and other expenses, and the effect of these fees will compound over time. As a hypothetical example, if an account generated a 10% return each year for five years, it would appreciated by 61%. If such an account paid a 1% annual fee, the appreciation on the fund would be 54%, or seven percentage points lower after five years.

BMO (2) Global Asset Management Pyrford

There have been no significant events within the firm (such as ownership or personnel changes) which have materially impacted the historical investment performance.

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#### REGIONAL TRANSIT ISSUE PAPER

Agenda	Board Meeting	Open/Closed	Information/Action	Issue
Item No.	Date	Session	Item	Date
2	02/01/17	Retirement	Information	01/17/17

Subject: Introduce the 2016 Actuarial Valuation Completed by Cheiron (ALL). (Bonnel)

#### <u>ISSUE</u>

Introduce the 2016 Actuarial Valuation Completed by Cheiron (ALL). (Bonnel)

#### RECOMMENDED ACTION

- 1. Introduce the 2016 Actuarial Valuation Completed by Cheiron
- 2. Review the Assumed Rate of Return
- 3. Review the Assumed Inflation Rate

#### FISCAL IMPACT

None as a result of this report.

#### DISCUSSION

Cheiron will present the preliminary results of the 2016 Valuation Study for the Sacramento Regional Transit District's Pension Plans. In order to finalize the Plans' actuarial studies and establish the actuarially determined contribution rate (ADC) for Fiscal Year (FY) 2018, Cheiron staff will review the study results, respond to questions and accept input from the Boards.

Each Retirement Board will be asked to accept its respective valuation study at the Quarterly Retirement Board Meeting on March 15, 2017.

The draft 2016 Valuation Study uses the Pension Plans' current Assumed Rate of Return of 7.50% and Assumed Inflation Rate of 3.15%. Downward modification to either rate would lead to an increase in Sacramento Regional Transit District's contribution rate for Fiscal Year (FY) 2018 while upward modification would decrease the contribution rate.

Acceptance of the 2016 Valuation Study will allow the ADC to be incorporated into Sacramento Regional Transit District's FY 2018 budget.

Approved:

Presented:

Final 1/24/17 Director, Human Resources

Director, Human Resources J:\Retirement Board\2017\IP's\February 1, 2017\[HB edits] Valuation Study - All 1\_17\_17.DOCX

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